Medical Life

MAR 10 1924

Medical Times

A Monthly Journal of Medicine, Surgery and the Collateral Sciences

Published by THE MEDICAL TIMES COMPANY at 95 Nassau Street

VOL. LII, No. 3 NEW YORK, MARCH, 1924 Twenty-Five Cents a Copy Two Dollars a Year

CONTENTS

A New Conception and Successful Treatment of Bronchial Asthma..... 49
BURTON HASELTINE, M.D., Chicago, Ill.

The Internist's Problem in Asthma..... 53
A. W. LAFORGE, M.D., Chicago.

Paget's Disease of the Bones..... 56
H. I. GOLDSTEIN, M.D., Camden, N. J.

Europe from a Urological Standpoint.... 60
WINFIELD SCOTT PUGH, M.D., New York.

Potentiality of Treatment and Instruction in Long Standing Deaf-Mutism..... 64
E. M. JOSEPHSON, M.D., New York.

THE PHYSICIAN'S LIBRARY 65

PUBLIC HEALTH 66

EDITORIAL.

A Book to Read..... 67

The Ideal Pediatric Department of a General Hospital 67

A Painless World..... 67

A Unique and Attractive Plea..... 68

A Type 68

MISCELLANY.

A Fatal Fault in the Teaching of Therapeutics 68

SYPHILIS 70

Established 1872 *Entered at the New York Post Office as Second Class Matter*

GASTRON

An Alcohol-free Extract of the Gastric Glands

GASTRON is obtained by direct extraction from the entire mucosa, including the pyloric membrane, of the fresh stomach of the pig in an acid-aqueous-glycerin medium.

Gastron presents in a stable potent form a complete gastric gland extract containing the constituents of the entire gland tissue, as well as those of the peptic cells.

Gastron is designed as a clinical resource in disorders of gastric function.

FAIRCHILD BROS. & FOSTER
NEW YORK

In 6 oz. amber vial without lettering, in order that it may be prescribed in the original container.

The Aftermath of Acute Infections

(Impoverished Blood, Depleted Tissues, Exhausted Vital Forces)

makes convalescence a critical period. A neglected convalescence often marks the starting point of chronic ill-health.

Compound Syrup of Hypophosphites "FELLOWS"

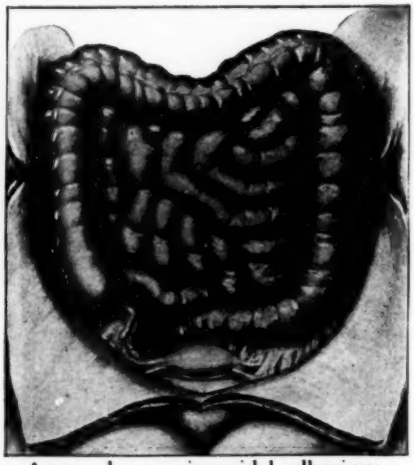
Is a time-honored and proven tissue builder and tonic.
It is valuable in convalescence from exhausting illnesses.
It is easily assimilable and pleasant to take.

Write for samples and literature.

26 Christopher Street, **Fellows Medical Manufacturing Co., Inc.** New York City, U.S.A.

Spastic bowel; *(a)* showing ulcerations

Dyschezia due to fecal impaction



Atony due to sigmoidal adhesions

LUBRICATION THERAPEUSIS

As you know, constipation usually follows an evolutionary course.

Atonic Constipation is characterized by a relaxed, inactive gut favoring fecal impactions, particularly at the flexures of the intestine, and predisposing to inflammatory conditions, resulting in colitis. Nujol will prevent the formation of large fecal masses, thereby lessening bowel distention with its consequent inhibition of peristaltic nerve impulses.

Spastic Constipation is characterized by a narrow lumen with deep crypts, hypermotility and dry, hard scybalous feces covered with mucus. Nujol lubricates the constricted canal, permeates the crypts, softens and coats the scybalous masses, thus relieving friction and consequent irritation.

In Dyschezia (rectal constipation) the feces may reach the pelvic colon in normal time, but the rectum is evacuated with much difficulty. The feces, by remaining too long in this region, have all the water abstracted, become hard and dry, and painful defecation ensues with resulting complications. Nujol keeps the fecal mass in this region soft and prevents complete water abstraction, thereby acting prophylactically against rectal diseases.

Nujol, the ideal lubricant, is thus the therapeutic common denominator of all types of constipation. Microscopic examinations show that too high a viscosity fails to permeate hardened scybala. Too low a viscosity tends to produce seepage. Exhaustive clinical tests show the viscosity of Nujol to be physiologically correct and in accord with the opinion of leading medical authorities.

Nujol

Guaranteed by NUJOL LABORATORIES, STANDARD OIL CO. (NEW JERSEY)

Medical Times

A Monthly Journal of Medicine, Surgery, and the Collateral Sciences

Vol. LII., No. 3 | New York, March 1924 | Twenty-Five Cents a Copy Two Dollars a Year

Board of Contributing Editors

WM. G. ANDERSON, M.Sc., M.D., DR.P.H....New Haven, Conn.
JOHN W. BOWLER, A.M., M.D.....Hanover, N. H.
EDWARD E. CORNWALL, M.D., F.A.C.P.....Brooklyn, N. Y.
LIEUT. JOHN DUFF, JR., Medical Corps.....United States Navy
KENNON DUNHAM, M.D.....Cincinnati, O.
W. L. ESTES, M.D.....South Bethlehem, Pa.
HAROLD HAYS, A.M., M.D., F.A.C.S.....New York
WALTER J. HIGHMAN, M.D.....New York
HOWARD LILIENTHAL, M.D., F.A.C.S.....New York
EDWARD H. MARSH, M.D., DR.P.H.....Brooklyn, N. Y.
ROBERT T. MORRIS, A.M., M.D., F.A.C.S.....New York
HENRY T. MORTON, M.D., F.A.C.S.....Brooklyn, N. Y.
GEORGE THOMAS PALMER, M.D.....Springfield, Ill.
JOHN O. POLAK, M.Sc., M.D., F.A.C.S.....Brooklyn, N. Y.
JOHN PUNTON, A.M., M.D.....Kansas City, Mo.
CHARLES S. ROCKHILL, M.D.....Cincinnati, O.
DUNBAR ROY, M.D.....Atlanta, Ga.
DUDLEY A. SARGENT, M.D.....Cambridge, Mass.
ALBERT H. SHARPE, M.D.....Ithaca, N. Y.
JOHN P. SPRAGUE, M.D.....Chicago, Ill.
ALMUTH C. VANDIVER, B.S., LL.B.....New York
REYNOLD WEBB WILCOX, M.D. LL.D., D.C.L.....New York

A New Conception and Successful Treatment of Bronchial Asthma*

BURTON HASELTINE, M.D., F.A.C.S.,
Chicago

In the whole realm of clinical medicine there is no other problem so baffling as the problem of bronchial asthma. We have tuberculosis, syphilis, cancer and other problems each baffling in its way, but each presenting certain demonstrable facts upon which we can build with confidence. In the literature of these subjects we find a record of consecutive achievement enabling us to meet the clinical problem with fairly definite knowledge of how much we can accomplish and by what methods.

Not so with the problem of bronchial asthma. The more we study the literature of this subject the more we find it a hopelessly chaotic jumble. In the whole world's literature of asthma there is nothing approaching a satisfactory conception as to the etiology, pathology, or essential nature of this distressing affliction.

Even more hopeless is the literature of treatment. In Brown's textbook, which was the most complete at the time of its publication (1917), the author quotes two hundred and thirteen different authorities and recommends two hundred and thirteen different ways of treating asthma. In Coke's book (London) published this year, is added about an equal number of new authorities and new methods, none of which is claimed to be more than partially or occasionally successful. Some, indeed, of the procedures recommended are, to American physicians, outrageously crude. (I refer especially to the destruction by cautery of large areas of nasal mucous membrane, a measure abhorent to any modern rhinologist.)

We are led to inquire the causes of this state of affairs. Why in the fifty years that have witnessed the greatest medical progress of all times has so little been added to our knowledge of this condition?

As to pathology, the answer to this will be apparent when we come to discuss the true nature of asthma.

Regarding treatment, the causes of this absurb situation are: First, entire lack of authentic knowledge as to etiology and pathology; second, the wide prevalence of the malady compels every practitioner to meet it, while ignorance compels him to meet it blunderingly; third, its distressing nature leads him to try all sorts of measures, regardless of their logical appeal. Fourth, the protean nature of asthma is such that the most widely various measures are often rewarded by real or apparent success, and the gratified experimenter hastens to report his "cure."

This is why the literature of asthma is gorged with reports of methods yielding "encouraging results" or "gratifying success" or "considerable improvement," while there is not in all literature a report of consecutive cured cases such as it was our privilege to present at the Clinical Congress of Surgeons in Chicago last October. (I refer to the report of one hundred and ten cases that had remained asthma free and without treatment for a minimum period of two years.)

This is why almost any doctor can tell you of some treatment in which he has faith because of some apparent result, but when he tries the same thing on other cases his faith oozes away.

This is why so many fake asthma cures are born and live their little day. No treatment has ever been proposed by any quack or faker so silly that it has not seemed to cure some cases of asthma. And no treatment has heretofore been devised by scientific medicine with any better record.

There would be no purpose in coming before you if it were only to point out the helplessness of the medical profession in regard to the problem of asthma. These facts are mentioned only as a reason

* Read by invitation before the Northern Medical Association of Philadelphia December 14th, 1923.

for asking your serious and critical attention to a conception of the asthma problem somewhat different from any you have heard before.

But difference is not its only merit. It is a conception that has led to accomplishment. It has accomplished five things not achieved by any previous study of the subject.

First, it furnishes an etiological and pathological explanation for the whole syndrome of bronchial asthma, one that squares with both scientific knowledge and clinical observation.

Second, it explains why anatomical and pathological studies including post mortem findings have yielded nothing clinically helpful. No single fact has been revealed by such investigation that can be used in the treatment of these cases.

Third, it explains why the various classifications into types are so useless and why sensitization tests and treatment based thereon, including vaccine therapy, are uncertain, haphazard and largely disappointing in results. These disappointing results are well known to every doctor who has tried the treatment or who has seen patients who have been so treated. That the most conspicuous advocates of vaccine treatment are disappointed by results is amply shown by their own public expressions: "Some patients continue free from asthma after vaccines are discontinued for many months, others only for a month or two, and some patients require the continuous use of vaccines to be free from asthma." —(Chandler Walker quoted by Billings in *Year Book of Medicine.)*

"It will be evident at once that in this therapy there is, with the exception of food reactions in children, nothing whatsoever in the nature of a cure. A result satisfactory to the patient is obtained by avoiding the source of trouble, but in no way can we today produce any permanent resistance or desensitization at will, for there is an inherited constitutional characteristic that, as yet, Nature alone knows how to cure."—(Robert A. Cooke, M. D., April, 1920; Phila. *College of Physicians Trans.*)

"We must learn to discard the word 'cure.' Once an asthmatic a patient is usually potentially an asthmatic for the rest of his life, just as a diabetic is potentially a diabetic whether his urine is sugar free or not."

"It must be remembered that the immunity is not permanent and it is necessary to give injections once a month or so to maintain it."—(A. Vander Veer, Jr., *Am. Jour. Med. Sci.,* July, 1922.)

Fourth, it explains the notoriously erratic and protean behavior of the asthmatic patient; his myriad freakish cures and his relapses from seemingly trivial and unrelated causes.

Fifth, it does more than explain. It opens an entirely new line of approach to the whole clinical problem of asthma. It offers a method of meeting this problem yielding results so far superior to those obtained by other methods as to be really revolutionary. Instead of the frank helplessness or blind groping with which the sufferer from asthma is commonly met, we now undertake his treatment with as much precision and certainty of results as we do any of the other curable diseases.

Nor is it necessary to waste time in vague or prolonged testing or experimentation. The same time that is given to a complete physical examination for any other purpose will yield the information necessary to tell the asthma patient how completely and how permanently he may be relieved and approximately how soon such relief can be obtained.

When such accuracy of prognosis is attained in bronchial asthma, and when complete relief can be obtained in an astonishingly high percentage of cases, the word revolutionary is not too strong a word.

Following such claims as the above you are ready for the announcement of some newly discovered formula, method, system, or mechanism which you can buy or operate under patent and cure all cases labeled asthma.

We bring you no such magic thing. Indeed, we bring you little knowledge you do not already possess except as you may have forgotten or neglected to apply it. But we do ask you to discard all the theories, speculations and classifications with which the literature of asthma is encumbered and start from the one fact that seems to be established and generally accepted; namely, the clinical phenomenon known as bronchial asthma consists essentially of a spasm of the musculature of the small bronchioles.

Accepting this as true, we now ask, What in its essential nature is a spasm? It is an exaggeration, prolongation or other abnormal modification of a normal reflex. This means it is primarily an affair of the nervous system and is functional rather than structural in its inception. It is of the utmost importance that this point be clearly understood—it means that a functional disturbance precedes any structural change; hence all examination of pathological tissue ante- or post-mortem is the study of a result and not a cause.

If a spasm is a modification of a normal reflex, then the structures necessary for its production are the same as for the production of the reflex; namely, a peripheral sensory organ, an afferent nerve, a central nucleus or nuclei, an efferent nerve and an end organ such as a muscle fiber in which the final result is manifested. It must be remembered that the sensory receiving structure is often anatomically remote from the muscle or other organ in which the final result is shown.

Next let us consider what conditions may produce this exaggeration of a normal reflex which we call a spasm. There are three. First, direct trauma or damage to the central nervous system from localized disease. This may be omitted from our present discussion. The two factors essential to the production of a non-traumatic spasm are: First, the acute or chronic exposure of the central nervous system to the action of a poison (toxin). This poison may be exogenous or endogenous, single or multiple, bacterial or non-bacterial. Second, an abnormally irritable peripheral sensory organ.

In the particular spasm known as an attack of bronchial asthma the two producing factors are:

(1) A highly toxic condition, chronic in nature, vaguely recognized under various names, but present in all cases. (Toxemia, anaphylaxis, allergy, "atopy", acidemia, sensitized state, etc.)

(2) An abnormally irritable peripheral sensory organ which in this case is the ethmoid area of the nose.

This toxic state may result from many causes, but it is always an improper balance between the absorption of toxic materials and the physiological elimination of them. This is no vague mental conception—

it means the patient is in a perfectly diagnosable abnormal state presenting certain pathognomonic signs before he ever has a broncho spasm—he is an asthmatic long before he has the attack which puts the label on him. The asthmatic crisis is a toxic storm —an explosion—and it occurs when the machinery of elimination is no longer equal to the load put upon it. The trigger which initiates the explosion is in the ethmoid area—the region to which has been given the very apt name of the asthmo-genetic zone.

The asthmatic patient is in a constant state of delicate balance between absorption and elimination. Anything that helps to throw the balance the right way will relieve him; anything throwing it the wrong way will increase his distress. The asthmatic patient has an abnormal ethmoid. Anything that lessens ethmoid pathology will relieve him; anything that increases ethmoid pathology will increase his distress.

The reflex arc which makes this spasm possible is formed by the connection between the trigeminal sensory nucleus and the nucleus ambiguous and the dorsal nucleus of the ascending vagus root. These well recognized anatomical connections are clearly shown by the two charts I now have to refresh your memory, one of the sensory supply of the nose through the trigeminus and the other of the deep connection to the motor root of the vagus which supplies the bronchial musculature. It is through this arc that is produced the normal sneeze or cough from irritation of the ethmoid and it is probable that by this same mechanism is produced the wave of contraction of the bronchiolar muscle fibers that has been shown to occur in normal respiration. These reflexes would appear to be the physiological analogue of the broncho spasm. It is not necessary to speculate regarding the peripheral area concerned in the production of broncho spasm. It can be demonstrated in almost any susceptible individual.

Two other elements begin early to play a part in every asthma case; one is the habit factor, how important no one can say, but probably more and more predisposing him to these explosions. The other is the occurrence of tissue changes in the lungs and bronchi which must result from such ordeals—changes which, originally secondary, may play a highly important role in later stages.

It is indeed these late thoracic changes which have so engrossed the attention of pathologists that they have missed both the essential factors in the etiology of asthma. It is not an accident, that the rhinologist has gone farther than the pathologist in the solution of this problem. By a combination of circumstances readily understood, it is a clinical fact that the ethmoid labyrinth may be and frequently is both the source of toxic absorption (or one of its sources) and the exciting end organ.

The importance of the rhinologist's role in asthma is thus apparent and it becomes clearly defined. This is a distinctly new and highly significant addition to our knowledge of the subject. Many men have many times discussed the relation of nasal pathology to bronchial asthma and most practitioners have seen some cases greatly helped by some form of nasal treatment. But regarding the question of how to determine which cases call for nasal treatment or what form of treatment should be given, there still exists nothing but conjecture and confusion. Such conjecture and confusion is no longer necessary.

By the intelligent application of the principles here outlined the skilled internist and rhinologist working in co-operation can predict and obtain results in bronchial asthma with as much precision and as much success as in any of what are called the solved problems of medical practice.

The subject of general diagnosis and treatment will be presented in detail by Dr. La Forge. Before discussing the rhinological phase let us consider some of the theories and methods now extant in relation to the conception we have outlined.

All of the older notions based upon study of thoracic tissue changes are obviously discarded since they are mistaking results for causes and relatively late results at that.

The endocrinologists have discovered some facts about asthma and have come near to explaining some etiological factors, but they, too, appear to be confusing effects with causes. There is a frequent relationship between endocrine dysfunction and bronchospasm and benefit often results from treatment for the correction of the endocrine imbalance. But with increasing experience we have come to regard the endocrine disturbance as a result of the toxic state rather than the cause of it and to depend more upon de-toxication than upon endocrine therapy *per se*.

The recent French theories of hyper-vagotonus, or sympathetico-vagotonus (Lian in *La Presse Medicale*, Dec., 1921—and Galup, *idem*, June, 1923) approached a little nearer to the truth, but they unhappily headed into a cul-de-sac, and like Omar of old, came out by that same door wherein they went. The reason for this is, they began by tracing the reflex backward from result to cause, only getting as far as the vagus nuclei, where they lost the trail.

The theory of anaphylaxis as originally advanced and for a time accepted as explaining the phenomena of asthma has now been made over into what is known as the allergic theory. We are now told that the term anaphylaxis should only be applied to an abnormal sensitization artificially produced. But this restricted application may be misleading and even dangerous, for we often meet cases in which anaphylaxis has been unintentionally and unknowingly induced by drugging and in which further attempts at desensitization by methods now in vogue produce most unhappy consequences.

Coke states in his recent book that forty deaths have been reported from this cause, while many less serious unfavorable reactions have of course been noted. When the doctor meets disaster in these circumstances and sorely needs the anaphylaxis alibi it isn't fair to cut him off with the statement that anaphylaxis is only produced in the laboratory. But he must be taught that the asthmatic patient is carrying a toxic load already straining his capacity. The deliberate addition of more toxic substances to that load is illogical, unscientific and dangerous. Regardless of a priori judgment, it could not be condemned if justified by results, but the best claims made for it are not such as we would consider a recommendation for any form of treatment. Even the term protein sensitization can no longer apply, since about an equal number of offending substances are found among non-proteins.

If we are to use the very latest and most accepted style of nomenclature, we must of course speak of the phenomena of allergy. You will be surprised perhaps that we speak with a tinge of facetiousness concerning these (for the moment) much respected

theories. Please do not misunderstand us on this point. We follow with deep interest the work of all who are studying the phenomena of allergic reaction and we watch closely the results of treatment by their methods. We are in a peculiar position to see such results, because nearly all the patients who consult us have had expert treatment by those methods before we see them. In a few instances where such methods had not been employed we have sent patients to experts for a course of vaccine therapy before accepting them for treatment. All such cases have returned to us unimproved and been relieved by other measures.

We admire the sincere and laborious work done by these investigators, but admiration for their zeal must not blind us to the meagerness of their achievement. If we had nothing better, we would gratefully use the small modicum of help they have been able to give us. But we were obtaining results far better than they have even claimed long before the allergic theory was conceived. We find no fault with the most elaborate system of sensitization tests as an experimental search for knowledge, but in the treatment of the asthmatic patient it is a useless and harmful waste of time.

It is obvious that we recognize the state of hypersensitiveness, for we have described it under another name as an essential factor. The great point is that there is one underlying condition that is basic—the toxic state we have described—and when this toxic state is corrected by suitable treatment *all* forms of sensitization disappear. The uselessness of all this testing and tinkering with symptoms where the basic cause can be removed is sufficiently obvious.

We have had patients suffering from almost every conceivable form of sensitization; foods, such as eggs, tomatoes, cabbages, oatmeal, wheat, corn, beefsteak, sachet, drugs (especially asperin), serums—who after treatment (non-serum) were immune to all previously exciting substances. They are required to eat the offending foods, fondle cats, ride horses and powder their noses in the most fashionable way.

If you can do no better, it is proper of course to determine as many as possible of the offending materials and protect the patient from them. It is permissible perhaps, where this can be done, to let the patient call himself cured, but one should not offend our medical intelligence by so naming it. If you had a patient with an eye so sensitive that he could not bear the faintest ray of light, you would quite properly confine him in a dark room, and in all other ways protect him, but you would not report him c d while the eye remained in that condition.

An interesting study of one of the minor factors in the etiology of asthma has recently been made by Novak of Chicago. He has observed a deficiency in the calcium content of the blood in six out of twelve asthma cases studied and in almost one hundred per cent of about ninety allergic patients of the non-asthmatic type.

Benefit has resulted from raising the calcium content in all cases where it was found low. If these observations are supported by experience, it will add a still further refinement to our technique in estimating and controlling the balance between infection and resistance. It offers help especially in meeting the problem of hay-fever, which we have not so completely solved as we have the problem of asthma. It should be clearly understood, however, that the peculiar relationship between these two conditions is no longer a mystery. We have equally interesting reports to make on this subject with clinical histories illustrating every phase, but these are necessarily excluded by the length of our program.

It is necessary for me in closing to refer briefly to the measures to be employed by the specialist.

The rhinologist's part of the problem is met first by careful determination of the amount of pathology present in the nose and paranasal structures, especially the ethmoid labyrinth. This may require repeated examinations and the subjection of the patient to a few measures which we call diagnostic treatments. Pictures are of course made, usually including the teeth, which are often a contributing factor. But in the ethmoid we are dealing with a location and with a type of pathology in which the x-ray gives very little help.

Surgical conditions when found are treated by well known methods, but surgery is not our only resource and operations of the radical type are rarely necessary. Ethmoid blocking must be relieved whether from septal deformity, adventitious growths or hyperplastic disease. Following the removal of mechanical obstruction we have a resource of tremendous value in the method called the Dowling treatment, introduced to the profession by Dr. J. I. Dowling of Albany, N. Y., some twenty years ago. This treatment is not generally known to rhinologists, which is unfortunate, because all who have mastered its technique agree that it is the most valuable non-surgical procedure ever given us. It differs from all other methods of treating mucous membrane infections in that it is not a surface treatment, but depends upon infiltrating the submucous tissues with a solution that is distributed far beyond the available surface area. By this method we obtain some of the most pronounced and lasting results. It is this chiefly that enables us to avoid entirely the palliative use of cocain, adrenalin and similar drugs, which is much too common in rhinological practice. I cannot too strongly express my disapproval of the repeated use of strong cocain solution as a routine treatment now advocated and practiced by certain prominent rhinologists.

The use of cocain or any similar drug except for surgical purposes is unknown in my practice and I can relieve any distress from a rhinological cause that is amenable to cocain treatment. Let it be understood, then, that when we relieve our asthma caces we are not doping them, locally or generally. Even the hypodermic use of adrenalin to control the attack becomes unnecessary usually in a short time.

Ambulant Treatment of Ano-Rectal Fistula

A standardized technic for these conditions is noted by Crookal. In each case of fistula once a week, preferably on Saturday, he excises the fistulous tract for ½ to ¾ of an inch, using novocain anesthesia. He puts in a gauze drain which is removed on Tuesday. By following this up regularly he gets excellent results.—(*Ther. Gaz.*, Dec. 15, 1923.)

The Calcium Balance

Sindler made two feeding experiments in three periods with growing individuals showed that the calcium balance depends on the supply of meat. The calcium balance is more favorably affected by a decrease in the meat ration than by addition of calcium chloride. In the latter case, the first retention of calcium is followed by its elimination by the kidneys and intestines. Loss in phosphorus consequent on administration of calcium was not observed, but rather an improvement of the phosphorus balance. Increased compensatory retention of potassium and increased excretion of sodium was also observed. The magnesium balance appears to depend on several factors.—(*Pfluger's Archiv.*, vol. 197, No. 386, 1923.)

The Internist's Problem in Asthma

A. W. La Forge, M.D.,
Chicago

This part of the program consists in showing how the individual patient is met, but before proceeding you should be prepared for what will probably be somewhat of a disappointment. You probably believe that certain tests or special examinations are made which reveal some mysterious information not discoverable by an ordinary physical examination.

Such is not the case. The examination which is made is not different from the examination we would make in any other kind of case. In fact, the first thing to do is to forget that we are dealing with asthma.

A history is taken, of course, but the history is just the same as any other, except that it contains the additional data pertaining to the asthma, the date of its first appearance, the number, severity and duration of the attacks.

A complete physical examination is then made including all of the usual laboratory investigations, and x-ray studies. Skin tests are not made. We do not make any skin tests upon asthmatic patients because long before the skin tests were invented far better results were being obtained in asthma than the most optimistic skin test enthusiasts are claiming today.

The physical examination having been completed and every clue suggested by the history or physical examination having been thoroughly worked out, an inventory of the findings is then made.

Down to this point the patient has been handled in precisely the same manner as you are handling patients every day, but there now comes a procedure that is perhaps a little different. It consists in a process of checking up between the internist and the rhinologist.

Experience has taught us that before asthma can develop, in any patient, there must exist in that patient a certain quantitative measure of infection. Therefore the first reason for this procedure of checking up is to assure ourselves that we have found enough to explain logically the existence of asthma. The second reason for checking up is to enable us to make an approximate evaluation of all our findings and to then outline a plan of treatment which will dispose of every one of these factors in their proper order.

This process of checking up our findings has taught us many things. It has taught us that this quantitative measure of infection which must exist to produce the asthma, can exist entirely in one focus in the body or that it may be distributed throughout several. For example, one may find one case with chronic nasal infection, and large masses of polyps in the nose with absolutely no source of infection discoverable anywhere else in the body. In another case we may find very slight nasal infection, but the remainder of that quantitative measure of infection, which must exist, can be demonstrated in the tonsils, the teeth, the gall bladder, appendix, fallopian tubes, prostate, or seminal vesicles, etc.

Clinical experience has taught us that in very young children the usual sources of infection are in the nose and tonsils. That a little later in life the appendix is a frequent offender, that later yet the teeth, the antra, and infected fallopian tubes begin to appear and that after forty the gall bladder, the prostate or seminal versicles become factors, with increasing frequency.

We have learned that where a history of marked constipation exists the quantitative measure of focal infection which must exist to produce asthma can be much less than in the cases where constipation is not present.

Checking up has taught us more things. It has shown that there exists a very close relationship between the nasal and the extra nasal findings. So true is this that a rhinologist who is especially trained in asthma work after examining the nose and throat can make a surprisingly accurate estimate of what the internists findings will be. The converse of this is equally true, for after a careful history and physical examination the internist can make a very close estimate of the amount of infection that will be found in the nose. Oftentimes the internist's scanty findings after careful examination will compel the rhinologist to revamp his estimate of the importance of nasal pathology that at first blush seemed relatively unimportant.

In more than one case, Dr. Haseltine, realizing that the patient's progress was not in direct ratio to the improvement of the nasal condition, has compelled me to re-examine the case and to my keen humiliation additional sources of infection were found which had been previously overlooked. I, too, at times, realizing that the patient's progress was not in direct ratio to the improvement secured in the general condition, have made the statement that additional nasal work was required and the results have borne me out. You can now readily understand that this relationship between the nasal and extra nasal findings is so close that with each specialist absolutely sure of his own ground he is in a position to call the turn on the other specialist.

The patient having been examined, an inventory of the findings made, these findings having been checked up with the rhinologist, the evaluation approximately estimated the entire plan of co-ordinated treatment to fit that particular case having been laid out, the patient then goes to the hospital.

Dr. Haseltine has stated that there is only one type of asthma, and that is "toxic" asthma, that toxemia is the one factor common to every type of asthma. The internist takes his cue from this and his task is to detoxicate a highly toxic individual. His first move is to begin a course of elimination treatment.

Elimination does not mean a dose of castor oil and a hot mustard foot bath. It means the intelligent use of carefully gauged, thoroughly co-ordinated measures, such as will increase the physiological activity of every excretory channel in the body without adding to that toxic overhead, already present.

The human body has four main avenues of elimination, the lungs, the skin, the urinary tract, and the intestinal tract, this being the order of their imporance to the human economy.

The lungs represent the most important piece of eliminative mechanism in the body, and their physiological activity is usually stimulated by physical exercise, but the possibility of doing this is automati-

cally ruled out in asthma, as exertion so frequently brings on attacks of broncho spasm. However, increased elimination from the lungs can be induced as a secondary result by increasing the activity of the three other avenues of elimination.

The skin represents the second most important avenue of elimination from the body and is the most neglected one in the whole practice of medicine. Physiologists tell us that the skin excretes daily twice as great a volume as the kidneys, yet physicians so completely forget this fact, that asthmatics, while actually under medical treatment, frequently show a dirty, yellow, sallow skin, whose very smell proclaims their toxemia. There are two ways of stimulating the skin function, by exercise and by drugs. Exercise can induce vigorous perspiration, but is automatically ruled out because of the physical exertion required, for the reason previously given. The use of drugs, like pilocarpins or jaborandi, is dangerous, as they add a drug poison to an individual already poisoned with toxemia. If it were only possible to secure vigorous perspiration by means of an agency that would not depress the heart, would not add drug poison to the already poisoned patient, and would not induce any severe secondary reaction, the problem of skin stimulation would be solved. Fortunately, this is possible in the intelligent use of heat. Heat, applied externally, in the form of a dry hot pack, meets every requirement enumerated above. The hot pack has another effect, which we believe is as important, if not more so, than the perspiration it induces. It relieves passive congestion of all the internal viscera. It drains the deep venous circulation and draws the blood into the superficial arterial system. There is no therapeutic measure that will, without any bad reaction, move so large a volume of blood in as short a time as the hot pack. From its very nature broncho-spasm must produce passive congestion of the lungs, which means stagnation of the entire deep circulation in the veins. The hot pack floods the superficial arterial circulation and hence automatically unloads the deep venous circulation, and experience would indicate that this is as important, if not more so, than the sweating.

The third most important avenue of elimination from the body is the urinary tract, and this function, too, can be stimulated by the use of drugs, but again, this means the addition of drug poison. The ideal drug to meet the requirements of a toxic patient, would be one that acts promptly, in no way increases the toxic overhead, is non-irritating to the kidneys, and yet is a solvent for all urinary solids. Fortunately these requirements are all met by the use of ordinary water. Water and plenty of it, ten to fifteen glasses a day. Water has a second but very important use under this plan of treatment, as it prevents the loss of weight that would result from the daily use of hot packs and hydrogogue cathartics.

The intestinal tract is the fourth and the least important of the body's avenues of elimination. In stimulating its function one bears in mind the fact that the liquid element of our body is a universal solvent for all of the toxic products which the body contains, hence intestinal de-hydration is equivalent to intestinal de-toxication, so the choice of a purge must necessarily rest on a hydrogogue carthartic. This class of cathartics, however, expend most of their action upon the colon. Therefore, a purely chologogue cathartic is added for its action upon the liver, and certain vegetable extracts for the stimulation of the small bowel.

The elimination treatment consists, therefore, in the use of a daily hot pack, daily cathartics, and an increased fluid intake. We have worked out a standard unit of elimination per twenty-four hours. Given an adult male weighing about 185 pounds, this unit would consist in a hot pack for one hour a day, one solid or semi-solid bowel movement, and two or three small liquid ones, and the drinking of twelve to fifteen glasses of water a day. Elimination treatment, therefore, is not a haphazard, rough and ready rule of thumb procedure. I stated that it meant the intelligent use of carefully gauged, thoroughly coordinated measures. Their intelligent use means that they must not be overdone. The careful gauging means that the treatment must be modified to suit the age, the weight and sex of the patient, and then again modified according to that particular patient's reaction day by day, while receiving it. Being thoroughly co-ordinated means that the treatment must contain measure which stimulate all the avenues of elimination, yet gives special consideration to the excretory channel which in that particular patient needs special attention.

All patients are put on a full diet. If the patient has in the past been on a restricted diet, all such restrictions are removed, for two reasons: First, the treatment quickly removes food sensitization, and, second, the nutrition of our patients has often been impaired by the diet restrictions to which they have been subjected. If skin tests have been made on the patient by some other physician, and the patient can recall the foods to which he was found sensitive, not only is a patient allowed to eat these foods, but we insist on his partaking of them frequently.

All of our asthmatic patients sleep on feather pillows, and we would allow them to sleep on feather mattresses if they were used in the hospitals. We do not compel our patients to leave the room while the nurse is either sweeping or dusting, and we allow them to use face powder to their hearts' content. In other words, we do not create an artificial environment for the asthmatic to live in, but try to make the hospital conditions conform as closely as possible to their home conditions.

The average patient living in Chicago remains in the hospital from two to three weeks receiving the elimination and other measures as above outlined. During this time the patient is receiving daily local treatments to the nose, and at the expiration of this time the patient is usually ready for the second step which in his particular case is called for. It may be the extraction of teeth, the removal of tonsils; it may be a nasal operation, or it may be abdominal surgery. We can usually predict in advance just exactly how much benefit will be derived from any particular procedure which the patient is put through. Our sole gauge for determining the amount of benefit to be derived is the amount of infection that is removed by that procedure.

All patients do not undergo nasal operations. Some of our most striking results have been accomplished entirely with non-surgical nasal treatment. Of course, in other cases extremely little, in fact, no progress is made at all until the nasal surgery is completed and the after-treatment has been received

We would have you understand that nasal surgery is always preceded by and followed up with local treatments to the nose, until such time as a nasal infection is disposed of. Other features are then disposed of in proper order.

I have stated that this conception of bronchial asthma is absolutely revolutionary in medical history. I base this statement upon the facts: First, that there is not one single procedure we follow that would not be highly beneficial to the patient whether he were asthmatic or not.

Second, because this plan of treatment has stood the test of over fifteen years of use and during all these years has been securing better results than any other plan of treatment in vogue today. I would have you clearly understand that fifteen years ago the attention which Dr. Haseltine gave to extra nasal conditions was not as perfect as it is today, but even at that early date his patients were being sweated with hot packs and careful attention was being paid to the intestinal and renal elimination. Further, that during these years articles were written on the subject by him in 1905, 1908, 1912, 1917, 1919, 1921 and in 1923. That not one word written in any one of these articles fails to hold good today. That each and every article is but a little fuller exposition of the fundamental principles of treatment advocated in the first article.

Third, because it is the only conception of asthma which removes all of its so-called "mysteries" and "erratic behavior" and clearly explains the why, the how and the when of every clinical phenomenon of the disease.

Fourth, because this treatment from its very nature consists in restoring a patient to a normal state and it represents the only reasonable basis upon which a permanent result could be expected. The hope of a permanent cure for asthma cannot rest in drugs or medication and this explains the admitably disappointing results of all attempts based on any such conception.

The procedures we employ in this treatment are essentially permanent in their nature hence the results can more logically be expected to be permanent also. We are not compelled to say to our patients that they must undergo the treatment every year "in the hope" as a local skin test authority recently wrote "that the happy result of permanent immunity might possibly occur."

Fifth, because we do not have to strain the clinical facts to make them fit into this conception. This conception was born in and is the product of the clinical facts of this disease. We are not compelled to strain your medical credulity to explain its so-called "mysteries." When a three months' old Fifth Avenue baby shows a positive skin reaction to camel's hair we can give you a much more logical explanation of it than to say that its mother or grandmother may have sometime gone to a circus.

Sixth, because when an asthmatic patient comes to you now, you have a conception of the disease which enables you to turn to the patient's advantage the correction of absolutely every abnormal conditions that exists in his body. Everything that modern dentistry can do today is now added to your own efforts towards the patient's welfare. Everything that surgery can do in removing sources of infection or sources of irritation are also added to your own efforts on the patient's behalf.

This conception is revolutionary because you need no longer grope blindly down the uncertain byways of haphazard medication. Once your patient is examined you can lay out a definite co-ordinated plan of treatment bringing to your assistance the rhinologist, the internist, the surgeon, and the dentist and can predict precisely the amount of benefit that will accrue from every measure employed. Patients are subjected to very little medication. We do not use any food or bacterial vaccines, nasal sprays, calcium injections, endocrine medication—narcotics or habit forming drugs. Adrenalin, simple laxatives and occasionally an expectorant mixture or heart tonic are used if necessary. Otherwise no specific medication is employed.

Summary

1.—The problem of the internist in bronchial asthma is to detoxicate a highly toxic individual and to restore normal elimination.

2.—This is achieved by the location and eradication of all sources of septic absorption and the restoration of normal function to all excretory channels by whatever means are indicated.

3.—Bronchial asthma can now be added to the list of controllable and curable diseases.

Discussion

Dr. Herbert M. Goddard, Philadelphia: When Dr. Haseltine invited me to open the discussion in Chicago at the last Congress of Surgeons, I must confess I did not believe the end results he had mentioned in his letters to me could possibly be obtained.

I went to Chicago and attended every clinic and there saw the results obtained by Drs. Haseltine and LaForge.

I am greatly indebted to Dr. Haseltine for the many suggestions he has given me in years past, but more especially for the emphasis he placed on the use of the Dowling tampon, for upon the proper use of this depends success or failure.

For several years past I have been using what has been termed the argyrol bath, which undoubtedly adds to the efficacy of the Dowling tampon, which is localized whereas the argyrol bath reaches all parts of the mucous-membrane of the nose and throat.

Dr. Haseltine has given more serious consideration and study to the ethmoid area in its relation to bronchial asthma than any one else and he may also be credited with calling our attention to the importance of group or team work and he is constantly reminding us satisfactory results cannot follow unless the rhinologist and internist work hand in hand.

Dr. A. C. Morgan, Philadelphia: I want to express my personal pleasure in being able to hear these papers. They have reduced the proposition to the fundamental principle of studying the patient as a whole and not simply taking isolated symptoms. I am impressed by the statement that asthma does not develop until the body has become surcharged with poison or toxins up to the point of supersaturation. Therefore the primary study of the patient must consist in the search for all foci of infection. There is much that I might say because these papers appeal to me strongly as showing us the great value of co-operation on the part of all men who are trying to study the diseases to which the body is heir.

Dr. J. I. Dowling, Albany, N. Y.: Since I have played a small part in what has been accomplished I will say a few words in collaboration of the value of what Dr. Haseltine has been good enough to call the Dowling treatment. It was originally introduced in connection with the treatment of ocular disease and it was concerning this that I first published the method. It remained for Dr. Haseltine to develop the fact that the same treatment is beneficial in bronchial asthma. I have often proved this to my own satisfaction and I fully confirm all that he says. I concur with him in the condemnation of cauterization within the nose which I formerly did frequently but have entirely abandoned. As to the possibility of cure of asthma it has been both surprising and gratifying to me to see the accuracy with which Dr. Haseltine and Dr. LaForge can predict and obtain results in apparently all cases.

Dr. E. B. Gleason, Philadelphia: During the past 25 years many cases of nasal asthma were referred to me by Dr. Anders and others. Our treatment was not a failure but so successful that I asked Dr. Anders what medicine he was giving these patients. He stated that none got the same treatment, but that perhaps iodid of potassium was the remedy most frequently employed. It was the old principle of increasing elimination as emphasized in the papers read this evening that did good in these cases. Many cases of asthma are toxemias and any treatment that removes the toxemia from the system does good. I was particularly pleased by the exploitation, as you might call it, by the speakers of the drinking of plenty of water. It does good in most forms of chronic toxemia, either with or without the addition of an alkali.

(Concluded on page 69)

Paget's Disease of the Bones

HYMAN I. GOLDSTEIN, M.D.,

ASSISTANT VISITING PHYSICIAN, PHILADELPHIA GENERAL HOSPITAL; ASSISTANT VISITING PHYSICIAN AND CHIEF OF THE MEDICAL CLINIC, NORTHWESTERN GENERAL HOSPITAL.

Camden, N. J.

In the MEDICAL TIMES, November and December, 1922 I reported nine cases of Paget's Diseases of the Bones that I collected from the records of the Philadelphia General Hospital.

They occurred in various services of the hospital. I had the opportunity of examining several of these cases. Three of the nine came to autopsy. These notes were included in the paper published November and December, 1922. Several photographs of cases II and IV which were omitted in the previous article are now included in this brief report. The records of the two cases omitted from the previous paper are given here. (Cases VII and VIII), those of Andrew Z, from the services of Drs. Hamilton, Carnett, Ingham and Weisenburg and Alexander M. from the services of Drs. Stevens and Burns.

Case X. Recently there occurred in the service of Dr. Joseph Sailer (Ward 336, Phila. Gen. Hospital) a case of von Recklinghausen's Disease (multiple neurofibromata), that clinically looks like a case of *Paget's Disease of the Bones.*

The patient is a white man, aged 57 years. Thomas C.

Blood Wassermann—Negative.

Has unusually large head, "bow legs," and resembles in appearance (clinically) the cases of Alexander M. (VIII) and William S. (II).

REPORT OF CASES.

Case VII. Andrew Z. or Stephen K. 5/7/19 nervous-disch. 5/13/19 Diagnosis:—Epilepsy (mentally deficient). 10/5/19 Admitted with diagnosis of Fracture of tibia. 10/5/19 Mental 11/5/19 Imbecility). Died 7/20/22 Pulmonary tuberculosis.

X-Ray 11177, 10/6/19, Lower 1/3/ tibia. No evidence of fracture.

X-Ray 17830, 6/19/22, Skull and Tibiae. The contour of the skull is well defined generally, and there is no thickening of the bones. Radiograms show practically a normal skull.

The sella is smaller from the floor backwards than is usually seen, it is slightly deeper. The floor is thin but intact. The posterior clinoid occupies a somewhat vertical position, and both clinoids bridge across the sella.

Tibiae:—Aside from some slight inward bowing of both tibiae there is no demonstrable bone lesion. Examination shows there is certainly no apparent *osteitis deformans.*

X-Ray 18026, 7/10/22, Lungs.

Extensive pulmonary tuberculosis involving all the lobes on both side with probably cavities in both upper lobes. There is marked mottling throughout all lobes of both lungs.

Past Medical History:—Has had fits since he was 13 years of age. Still has one about three to five months. Never hurts himself, never falls. Cannot describe attacks.

Present Condition:—Has not worked for 5 or 6 years, before that was a farm laborer. Whole mouth sore, teeth bad. Pains in eyes, headaches, pains in legs and arms. No appetite.

Physical Examination:—Patient fairly well nourished Polish man of 30, standing position is poor, is round shouldered, head bowed, gait shambling, wanders from side to side as he walks, tends to stumble.

Head:—See outlines for contour. Tracings were made by holding paper close to patient's head and outlining the shadow which was cast. Anterior posterior diameter of head is lessened. Bi-parietal is increased. Bregmatic mental is lessened.

Thorax:—Round shouldered. Right side slightly higher than left. Slight scoliosis to right.

Physical Examination by Dr. George Bevier (10/17/19):—Patient is rather well nourished. His appearance is remarkable for the extreme width of his head, a squint in the right eye, and an extremely dull appearance. His hair is light, sandy, thin, scalp negative, ears and nose negative.

Eyes:—Show an external strabismus, both eyes function but right is probably disregarded most, accounting for the squint on that side. Sclerae and conjunctivae clear. Eye movements free but not co-ordinated. Pupils react very little to light and accommodation.

Tongue shows slight tremor. Teeth widely spaced, Pyorrhea.

Chest:—Rather large, well shaped, seems to be slightly larger on right side. Movements very slightly increased on right. Clavicles prominent—left most. V. F. negative. Percussion negative. *Auscultation* gives few rales in left apex and at base of left scapula.

Extremities:—Arms normal. Legs present distinct lateral curvature both upper and lower. Most marked in lower, which led to the diagnosis (probably) of "fractured tibia."

Impression:—1. Slight impairment left chest. Not enough to lead one to suspect that sputum contained T. B. 2. *Wide head,* strabismus, squint, *lateral curvature of legs* point strongly toward *Paget's osteitis deformans.* 3. Feebleminded.

Case VIII. Alexander M. Service of Dr. A. A. Stevens on Medical and Dr. J. H. Lloyd on Neurological. Admitted 11/9/21 to Medical Dr. Stevens and Dr. Campion. White; aged 62. Occupation—laborer.

Chief Complaint:—Pain in back and legs.

History Present Illness:—Admitted to P. G. H. 11/9/21, assigned to Welfare Department as he was not acutely ill.

Patient states that he has not felt well for past three years. About two and a half years ago he noticed that he was "short of breath" on walking one or two squares. He often felt "dizzy." Thinks he had "vertigo spells." Once or twice he has fallen to the street, or floor, during these attacks, but never lost consciousness. Last attack three months ago.

For past two years, he has felt "stiff" in back and lower limbs, and has had vague, aching pains in his back, hip, and knee-joints. The pain is never sharp, but rather a feeling of "soreness and stiffness," which is worse after lying or sitting in a fixed position, and is relieved after exercise.

Two previous admissions to P. G. H.

1. 1907 Hemorroidectomy.
2. 1910 "Rheumatism."

Past Medical History:—No diseases in childhood, except sore throat, at rare intervals. "Varioloid" at 15 years. Pneumonia 25 years ago. Pleurisy 15 years ago. Otherwise well, until three years ago.

Surgical:—Fracture right knee-cap thirty years ago. Treated in Penna. Hosp. Hemorrhoidectomy P. G. H. 1907. No other injuries, accidents or operations.

Social:—Born in Philadelphia. Has always lived in poor hygienic surroundings. His father, a shoemaker, had a hard time to take care of family.

Patient attended school until 13 years of age, completing 5th Grade. Then he worked as errand boy in Wiles' shoe factory for one year, then worked in the "factory room" as "general handy man" for 6 years. He learned the shoe-making trade, which he followed for several years. For past ten years has done "odd jobs," wherever and whatever he could find. At present lives in a poor lodging house on Callowhill Street, sleeps in a room with four others.

Habits:—Has used alcohol freely, "off and on" for 40 years. Formerly took 5 or 6 glasses of whiskey daily. For past 2 years, an occasional drink, whenever he could get it. Does not use tobacco.

Sexual:—Gonorrhea at 24 years of age. Denies syphilis. Never married.

Family History:—Father and mother died at 73, and 70 years both of stomach trouble, one brother died in infancy, cause unknown. Two brothers and two sisters living. State of health not known to patient. No tuberculosis, malignancy, or cardio-renal disease. No epilepsy or insanity.

Status Previous:—Cardio-Resp.:—Cough, dyspnea, occasional dizziness.

Genito-Urinary:—Frequency. N. 3-4. D-4-5. No dysuria.

Gastro-Intest.:—No symptoms.

Patient's Statement as to Bony Deformity:—He has always been stoop-shouldered, and head was always large, but about 8 years ago he noticed that his body was bent over more than formerly. Also—he has had to buy a larger hat every two or three years.

Eight years ago he wore a No. 7 hat. Now he wears 7¾.

Gradually within the past eight years, his limbs have become bowed, making locomotion difficient.

Deafness, which began about ten years ago, seems gradually growing worse.

CASE II—WILLIAM S.

PHYSICAL EXAMINATION.

General:—This patient is a little stooped old man, with a "Ham" on his back, long monkey-like arms and bowed legs. His gait is insecure and he uses a cane to get about. Shows vagabondism and evidence of exposure to a more or less riotous life.

Head:—The head is extremely large, measuring 64 cm. at its greatest circumference, which is on a level with the eyebrows. It is enlarged laterally at the top and triangular in shape, with base at the vault.

The head is not symmetrical, being larger on the left side. Face is long, showing leonine facies. The lines of sutures in skull are marked. Temporal arteries sclerosed.

Eyes:—Ocular movements are normal. Pupils are irregular in outline. Right reacts well and promptly to light. Left reacts only slightly. Both react normally in accommodation.

Nose:—No abnormalities.

Ears:—Hearing impaired. No external obstruction.

Mouth:—No hemiparesis. Teeth poor, many missing. Tongue clean, has a fine tremor. Throat shows nothing abnormal.

Neck:—Short, thick. Some enlarged glands.

Chest:—Laterally chest is small. Anterior-posterior diameter is very markedly increased. There is a dorsal kyphosis, without the compensatory lordosis. An area of redness is seen over the kyphotic region. Some left lateral scoliosis. Expansion is poor.

Lungs:—Note on percussion is hyperresonant. No increase in fremitus. Breath sounds are clear. No rales. No friction sounds.

Heart:—Normal borders to percussion. Sounds are good. Aortic second accentuated and diminished pulmonic. Extrasystoles occur. No murmurs heard. Blood pressure 140/100.

CASE II—WILLIAM S.

Abdomen:—Flat, sort, coupled. There are three transverse folds. No tenderness, rigidity or hernias.

Extremities:—There are evidences of old fractures of arms, legs and hands. All the long bones are increased in length and have increased antero-posterior diameter.

There is antero-posterior and lateral bowing of humerus, radius, ulna, femur, tibia, etc.

Arms and legs are disproportionately long. Saber shins, monkey arms, etc., are present.

Arteries are thickened and beaded, not tortuous because of increased length of extremities.

Reflexes and sensations are normal.

Diagnosis:—Paget's Disease; Arteriosclerosis; Chronic myocarditis.

2/18/22. Patient has needed no treatment and was transferred to Neurological Department—service of Dr. M. A. Burns.

X-Ray No. 15948. 11/15/21.

Head, chest, femur, tibia, humerus and ulna.

Findings:—The chest is generally abnormal in shape. The heart is enlarged. There is considerable mediastinal thickening through the entire right side which occludes the right side of heart. There are some enlarged glands about left hilum. The lower ribs are abnormal. On the left side, from the 6th rib they apparently have no attachment to the sternum by cartilage but extend downward along the side of the body to just above the crest of the ilium. A similar condition exists on the right side. There is some abnormality about the distal clavicle and acromion, the latter being considerably rarefied.

The head of the humerus and shaft, particularly, are generally enlarged. The medullary canal is wider than normal. The radius and ulna do not show any bone changes although there is considerable atheroma of the arteries.

CASE II—WILLIAM S.

The skull is typical of Paget's Disease, the bones showing considerable proliferation plus rarefaction.

The tibia is markedly enlarged, the medullary canal increased in size. The bone is rarefied and roughened along the anterior and posterior surfaces. The femur is similar to the tibia but the condition is not so marked. There is atheroma of all the vessels of the leg.

Blood Analysis:—11/14/21 Wassermann—negative in all antigens.

Eye Examination by Dr. Reese:—12/4/22.

Vision R. E. 6/21: L. E. fingers at one foot.

Vitreous opacities in right eye and a number of faint areas of choroiditis in both eyes.

CASE XI.

Case XI. Emma M. January 17, 1923, No. 19786.

Roentgenographic Reports (E. Burville-Holmes, M.D.):

Skull—shows proliferative and rarefying osteitis—typical of Paget's Disease. Outer plate of skull is considerably thickened.

Sella—is saucer shaped, much shallower and longer than normal. Posterior clinoid process is enlarged and irregular in outline.

Right tibia—is enlarged and curved, and shows the same proliferative and rarefying process as in the skull. Similar change though less marked, is seen in left tibia.

CASE IV—MARGARET C. CASE XIII—EDWARD S. CASE IV—MARGARET C. CASE XIII—EDWARD S.

Urine Analysis:—Yellow, alkaline reaction, faint trace of albumin; no sugar; calcium oxalate crystals, uric acid. Few epithelial cells. (1/17/1923.)

Blood Count:—1/17/23—Hb 92% 4,430,000 R. B. C.; 4,350 W. B. C., polys. 69%, lympho. 26% mono. and trans. 4%, eosino. 1%.

Blood Wassermann:—Negative.

Blood Chemistry:—Urea-nitrogen = 18 mgm.; uric acid = 4.2 mgm.; sugar = 105 mgm.

1/17/1923. *Eye Examination:*—Beginning cataracts of both eyes—unable to see the fundi (Dr. Croskey).

Sugar Tolerance:—This patient showed an increased sugar tolerance.

This case was in the service of Dr. David Riesman, and I wish to express my thanks for the opportunity of making these studies.

CASE XII.

Case XII. Mrs. Abbie W. Age 73. Women's Medical Ward No. 214.

Admission 2/1/23. Medical Service of Dr. L. N. Boston. Came in with Chief Complaint. Pain in left hip: Blister on the big toe.

Family History and Past History, unreliable on account of the patient's condition. Patient was in Nervous and Surgical Wards in 1911 and 1913 for hemiplegia and cellulitis of the leg. Was in Holmesburg. She is disoriented as to place and time.

Physical Examination:—Fairly well developed and nourished female of 73.

Head, rather large. Frontal and parietal bosses prominent.

Eyes:—Left pupil smaller than right, both very slightly irregular and react very sluggishly to light and accommodate arcus senilus moderate.

Nose:—Negative.

Ears:—Grossly negative. There is a small mole below right ear.

Mouth:—Lower jaw protrudes markedly. All teeth have been removed. Upper artificial denture.

Throat:—Negative.

Neck:—Negative.

Thorax:—Broad and symmetrical. Expansion more marked on left. Right side seems slightly smaller than the left.

Heart:—Not enlarged to percussion, apex beat not marked, sounds distant, and one only fair, A2 P2.

Lungs:—Hyper-resonance on left side. Right has diminished resonance. Breath sounds increased on left side. No râles throughout both lungs.

Abdomen:—Negative.

Extremities:—Scars over both knees and shins. Knees and left hip restricted in motion. Knee jerks were not obtained. Left arm stronger than right. Right great toe has a blister.

Lymph Glands:—No enlargement. Some arteriosclerosis.

Blood Pressure—S. 170

D. 100

3/6/23. The head of the patient resembles that of Paget's Disease. Circumference of head is 22½".

Blood:—Sugar tolerance.

1. 125 mg. (fasting).
2. 220 mg. (after 100 gms. sugar).
3. 125.

Phthalein:—18% (1). 23% (2). Total 41% for 2 hours.

Urine Analysis:—Acid, 1.025-1.030, cloud albumin, occasional hyaline cast.

Blood Wassermann:—Cholesterin one plus. Noguchi—negative.

Blood Chemistry:—Urea—N. 11 mgm. Sugar—115 mgm.

Blood:—W. B. C.—6,200. Polys. 67%. Lymphs.—25%. Eosino.—5%.

Eye Examination:—Neuro-retinitis with extensive retinal hemorrhage. Beginning cataract (Dr. Kamerly).

3/9/23. No. 20327.

X-Ray Findings (Dr. E. Burville-Holmes):—Roentgenograms show bowing of the left and the right femur with apparent rarefaction of the bones. The right tibia is apparently normal, the left, however, shows considerable bowing with some sclerosis and rarefying process demonstrable.

3/7/1923. (Dr. E. Burville-Holmes.)

The Skull—on Stereoscopic Examination:—Roentgengrams show the typical changes of Paget's Disease. There is proliferating and rarefying osteitis.

T. P. R.:—Normal.

Dr. Becker and Dr. Gonzales, our internes, and Dr. Boston and I went over this patient, and felt that the case was one of Paget's Disease of the Bones. The roentgen-ray examinations prove the diagnosis to be correct.

CASE XIII.

Case XIII. Paget's Disease.

Edward S., Age 61. White man. Ward 433. Medical services—Dr. R. V. Patterson and Dr. Solomon Solis-Cohen.

X-ray (E. Burville-Holmes)—June 23rd, 1923, No. 21417—showed typical changes in the skull, right femur and tibia—Paget's Disease.

Blood Wassermann:—Negative.

Blood Chemistry:—Urea nitrogen 18 mgm. Sugar 130 mgm. Uric acid 3.6 mgm.

Sugar tolerance not done.

William S.; negro. Case II. From service of Dr. L. N. Boston. The clinical record of this case was included in the reports of cases in MEDICAL TIMES, November, 1922. The autopsy record now follows: No. 7814. Med. K2922. Died June 20, 1923.

Autopsy No. 7614; performed by Dr. Baldwin Lucke; 4 hours after death.

Clinical Diagnosis:—Paget's Disease. Mitral regurgitation. Adm. 3/20/22. Died 6/20/23 at 11:45 A. M.

Gross Anatomical Diagnosis.	*Histological Diagnosis.*
Bone:—Paget's Disease.	*Bone:*—Paget's Disease.
Bone Marrow: — Marked hyperplasia.	
Aorta:—Arteriosclerosis.	*Artery (Small):*—Arteriosclerosis.
Heart:—Hypertrophy: local interst. fibrosis: slight fibrosis of aortic valves: coronary arteriosclerosis: epicardial and endocardial hemorrhages.	Hypertrophy. Arteriosclerosis. Brown atrophy. Chr. interst. myocarditis. Chr. fibrous epicarditis.
Lungs:—Chr. passive congestion; early infarction of middle rt. lobe; arteriosclerosis of pulmonary artery.	Chr. pass. congestion. Emphysema (moderate). Lobular pneumonia (early).
Spleen:—Atrophy; fibrosis; arteriosclerosis.	Atrophy. Active congestion.
Kidneys:—Chr. interstitial nephritis.	Arteriosclerosis. Chr. Interst. nephritis. Cloudy swelling.
Stomach: — Postmortem hemorrhages; sl. chr. hyper-	

CASE VIII—ALEXANDER M. CASE XII—ABBIE W. CASE XII—ABBIE W. CASE XII—ABBIE W.

trophic gastritis.

Liver:—Atrophy; sl. fibrosis.

Slight congestion.

Cerebral arteriosclerosis.

Brain:—Intense arteriosclerosis.

Prostate (?):—Atrophy.

Cause of Death:—Paget's Disease of Bone.

EXTERNAL EXAMINATION.

General Statements:—Black male, 59, weighing 50 k., and measuring 150 cm. Slender build. Bones are much deformed. Skull is greatly thickened, circumference 66 cm. (in line extending from the occipital protuberance through the middle of the forehead). Parietal bones show considerable bossing.

Both femurs and tibiae have an outward curvature. The inner portion of the knees are separated by 12 cm., the middle of the inside of the thighs by 14 cm., in addition, there is a pronounced anterior curve of both femurs. Rigor mortis is well established. Body is still moderately warm. Eyes protrude slightly. There is present a marked arcus senilis. Pupils are regular in outline and equal in diameter. Ears and nose negative. Most teeth are absent and they are in fair condition.

Trunk:—Thorax evenly vaulted. Abdomen is scaphoid.

External genitalia show nothing of note.

INTERNAL EXAMINATION.

Abdomen:—Panniculus is scanty. Muscles are fleshy throughout. Peritoneum is smooth and glistening. Viscera occupy normal positions.

Thoracic walls are normal. Both lungs, but especially the left lung is moderately adherent and there is present about 400 cc. of lightly blood tinged fluid in the left chest.

Pericardium:—Contains 10 cc. of serum.

Aorta:—Has normal circumference. There are numerous hyaline and atheromatous plaques throughout the entire extent of the vessels. The aortic branches, and notably the coronary vessels, mesenteric arteries and splenic artery are considerably stiffened. Their intimal surfaces show many hyaline and atheromatous plaques.

Heart:—Weighs 530 gm. Organ is considerably larger than patient's clinched fist. Pericardium is smooth and glistening. Epicardium contains little fat. There are numerous punctate hemorrhages in several portions of the epicardium. Heart muscle is dark brown, very firm. Left ventricle averages 26, right 10 mm. Near the apex there are a few white, fibrous scars, which range up to 5 mm. in diameter. Papillary muscles are fleshy throughout. Chordae tendeneae are thin and separate. Mural endocardium, especially in the left ventricle is moderately thickened and shows numerous punctate hemorrhages. Aortic leaflets are slightly stiffened, especially the anterior aortic cusp. stiffening is more marked at the base. The other valves have normal shape. They measure: aortic 7, mitral 8.3, pulmonic 7.2, tricuspid 11 cm. Foramen ovale is closed. Just below it there is a purplish slightly elevated discoloration about the size of a split pea. Coronaries are as noted above.

L. Lung:—Weighs 360 gm. Organ is small, purplish, crepitant throughout. Pleura is smooth and glistening. Cut surface is intensely reddened and bloody. When blood is scraped off a definite brownish tint is noticed. Pulmonary vessels are considerably stiffened, their intima shows numerous hyaline and yellow atheromatous protrusions. Bronchi are normal.

R. Lung:—Weighs 760 gm. It resembles fellow except that the anterior edge of the middle lobe shows a discreet reddish black area, poorly circumscribed, and about 5 cm. in diameter. Very little frothy fluid may be expressed from this portion.

Spleen:—Is slightly smaller than normal, and very firm. Capsule is considerably thickened. Cut surface is dark red, trabeculae and cut vessels are very prominent, follicles are almost invisible.

L. Kidney:—Weighs 150 gm., measures 10 by 5 by 2½ cm. Capsule strips with some difficulty leaving a finely granular, mottled, purplish and pale surface. Cut surface has a slightly wavy edge. Cortex and medulla can no longer be differentiated, the former is decidedly narrow, greyish purple and shows no details. Pyramidal striations are seen only with difficulty. Peripelvic fat is moderately increased. Pelvis shows a few punctate hemorrhages.

R. Kidney:—Weighs 110 gm. Resembles fellow.

Stomach:—Is contracted. Walls are normally thick. Mucosa is normally rugose, and shows numerous postmortem hemorrhages. In addition, the pyloric portion of the mucosa has a somewhat cobble stone appearance.

Liver:—Weighs 1,080 gm., measures 26 by 16 by 7 cm. Capsule is here and there slightly thickened and there are occasional punctate hemorrhages. Lower edge is normally sharp. Organ is reddish brown and slightly tougher than usual. Cut surface is even, lobulation is indistinct, and about the lobular peripheries some greyish lesions may be seen.

Gallbladder:—Contains 30 cc. of tarry black bile. Mucosa is normal.

Pancreas:—Is small, but shows no gross resions.

Intestines:—Are externally negative.

Skull:—Shows definite bossing of the parietal bones. Calvarium is heavy and *enormously thickened.* A cross section of the occipital bone measures 26 mm., of the frontal bone 44 mm. Middle portion of the bones is softer than the external or internal table, and in this softer portion occasional gelatinous and hemorrhagic areas may be seen.

Bone marrow contained many delicate osseous spicules, it has a bright red, cheesy appearance, looking exactly like the marrow from a case of pernicious anemia.

Tibia:—The bone is also slightly thickened. Periosteum smooth. Marrow presents the same characteristics as that in the femur.

Sections taken.

Brain removed—weight 1,250 gm.

HISTOLOGY.

Bone Marrow:—Shows active proliferation of various cells. For detailed study see Oxidase & Wright's stain studies.

Heart:—The hemorrhages mentioned grossly do not appear in section. Epicardium is thick and fibrous, with congested vessels. There is slight sclerosis of vessels. Muscle cells are large, striations well preserved. Brown atrophy noted. A moderate interstitial fibrosis is present.

Bone (L Section):—A well formed spongy bone contains large irregular areas of fibrous tissue. This tissue contains few nuclei and a few fibres. Fat is present in a considerable amount. The edges of the bone are ragged and moth eaten, giving the appearance of erosion, which is evidently taking place. Osteoclasts are not seen. A very few multinuclear giant cells are shown in the fibrous areas. The appearance is not that typical of Paget's disease. Osteitis fibrosa cystica is a more accurate designation, though the cysts of this latter condition are not shown here.

Pia is normal. All arteries are intensely sclerotic. Veins somewhat injected. There is a distinct foramen magnum pressure about the inferior portion of the cerebellum. Convolutions normal, no areas of softening or atrophy.

Diagnosis:—Intense arteriosclerosis.

On horizontal section through the basal ganglia an area of softening is seen at the anterior portion of putamen, reddish brown and involving the anterior limb of the internal capsule. Section of this are a taken.

Brain kept for the present.

(*Concluded on page 70*)

Europe From a Urological Standpoint*

WINFIELD SCOTT PUGH, M.D.
New York.

There is perhaps nothing fraught with so much danger to the medical man, as the late Prof. Osler so often remarked, as the possibility of becoming a chauvinist, or anything more helpful and diverting than to look around and see how the other fellow does it—get his point of view, as it were.

This will be very thoroughly impressed upon one by a visit to Europe, where one finds that only too often advantage is not taken of real advances, solely because of the fact that they were first used by some live-wire in one of the adjacent countries.

The first important seat of urology on the continent that one reaches is Paris, which enjoys the reputation of having turned out so many well-known urologists from the old Guyon school and the Necker Hospital. Those most prominent in Parisian urology are Marion, Leguerre, Papain, and Hitze-Boye, all of whom have well developed clinics and wards of from 40 to 60 beds. Considerable urologic surgery is also done by Victor Pauchet, well known for his extensive work in local and regional anesthesia, and Louis Bazan of the transverse incision.

I had the pleasure of seeing the first three operators. Prof. Marion is particularly skillful in intravesical operations, a field in which he is greatly interested, and has devised a number of instruments for this technique, notably his thermo-cautery pinzette, for the thermal destruction of intravesical growths, and his foreign body forceps, both of which somewhat resemble those of Young. He operated on a large pyonephrosis by the transverse incision, and is a very skillful worker. I saw many plates for the new work on endoscopy and cystoscopy (which he will bring out in collaboration with Hitze-Boye) and found them very beautiful.

Prof. Legeau has devised a very ingenious three-bladed retractor for use in supra-pubic operations on the bladder, which is well worth having. In prostatectomies all patients are placed in a modified Trendelenburg position, the bladder distended, then opened and the prostate removed under direct vision.

Legeau is much interested in the Ambard constant and told of 264 cases in which he had done a nephrectomy with the use of the constant alone, minus ureteral catheter, and of 367 cases with catheter, and thought that he obtained better results with the Ambard constant alone. A very extensive paper will appear on this subject from the Necker archives. Prof. Marion does not seem to be so highly enthusiastic, although he uses it. This method has been very thoroughly tried here and relegated to the archives of urological history.

I saw several other functional tests going on with indigo carmine, but it seemed to me they were in reality meatoscopies. The sterilizable cystoscope of Dr. Papain (but in which all the ocular system has to be first detached) was about the only recent development in that line in the Paris Sector. In passing I might say that the endoscope type of cystoscope is still predominant in Paris.

In Zurich I was fortunate in locating Dr. Hottinger, a very competent urologist. He pointed out to me a new hospital of 240 beds now under erection, which will be exclusively for urology. Apparently the abolition of public prostitution has greatly aided in increasing the urological material.

At Innsbruck, Austria, a University center, I saw some good gastro intestinal work by Prof. Boerhoven. The Bau gynecologic clinic is also a very busy institution and its members do splendid work.

Vienna is the real Mecca of the American medical man and very justly so, as everything is made a possibility for him. Any kind of a course can be obtained, with highly competent instructors, at the reasonable price of about $1.50 a nhour for practical work with two in the class, or even much less where there are larger classes. Living and everything else is reasonable in Vienna. The American Medical Association of Vienna really controls most of the post graduate work, has usually about 100 resident members, and last year turned in about $140,000 in fees to the University. The Viennese are a fine people and certainly make one feel very much at home.

Prof. Rubritius and Prof. Blum have the chairs of urology at the University. They and their associates in functional testing use very largely the water concentration and dilution tests of Volhard, and the indigo carmine method. They say these methods are simple and can be carried out directly under their own eyes. They use the chromocystoscopy tablets of Joseph and Voelcker, which incidentally are very convenient. The Viennese operators all do suprapubic prostectomy and it is the rule where possible to use prelimary urethral drainage. I might add that it was entirely successful in every case I saw, but we must remember that the European is certainly a much less sensitive person than his brother American.

Following urethral drainage the prostatectomy is completed in one stage somewhat as follows: Local anesthesia is used and a diamond shape area of infiltration is made from the following points: A wheal in mid line just below the umbilicus, another in the same line just above the symphysis, midway between these two areas, but at the outer border of each rectus muscle another wheal is raised, and from these points superficial and deep infiltrations of 1 per cent novocain were made, with a long needle. The patient is placed in moderate Trendelenburg, the usual supra pubic incision made, the bladder gradually distended, then opened and the water drawn off. The prostate is now examined visually and its capsule infiltrated with novocain, then incised laterally and the gland removed. The drainage is then maintained by a large L-shaped supra-pubic tube and another straight tube for irrigation. The anesthesia of the prostatic capsule does not seem to me to be as complete as it might be. In fact, I think that the sacral injections are a bit more satisfactory.

I saw two cases of well-marked renal hematuria (in which it was difficult to determine a cause) clear up promptly under decapsulation and this is the usual procedure in such cases. Dr. J. Bentley Squires once told me that he always regarded a kidney operation as a one man job, but the European

*Read by invitation before the Brooklyn Urological Society, Nov. 13, 1923, and the American Urological Society (New York Branch), New York City, Nov. 28th, 1923.

*From the James Buchanan Brady Urological Foundation of the New York Hospital.

has great respect for the kidney and always has ample assistants. One only has to see a torn renal pedicle to grasp the significance of this.

Bladder tumors that are not too large or too numerous are fulgurated with a milder current than is usually used here, the oudin type, which is not quite so snappy as the D'Arsonval. The tumor is fulgurated in a number of sittings, a very small area being treated each time at intervals of 8 to 10 days, and in very sensitive patients the interval is longer. Great care is taken to avoid production of extensive edema, and future ulcer formation. These ulcers, when they do form, are often worse than the original disease. From the care with which men of great experience handle the question of fulguration, there must be a reason for it, and they certainly do not get those prolonged hematurias which are only too frequent here.

In carcimona of the bladder, resection is usually done, except in the advanced stage, where x ray and radium are employed. The Viennese apparently are not very greatly impressed with the extensive resection and implantation of the ureters into the rectum or sigmoid, as is done in the other sections of Europe.

For stone in the kidney anterior pyelotomy is the operation of choice, and I saw some very fine work in this line, notably by Dr. Zinner. One sees considerable ureteral surgery in Vienna, but mostly by the gyecologist, as in the course of an extensive uterine operation, such as the Wertheim amplified operation for carcimona of the uterus, large myomata or extensive adhesions, the ureters are often damaged, as prelimary catheterization is seldom used. The type of operation in a damaged ureter is usually that of splitting the lip of the upper segment and drawing it into the lower. Plastic work and ureteral anastomosis certainly requires great care and often fails even in the hands of the most experienced.

Pyelography is extensively used in Vienna. They usually use a much smaller ureteral catheter than necessary in order that the excess of injected material may drain off. The patient is never injected until tube, plate and everything else necessary is ready and the injection method is then used, usually sodium bromide. Double pyelograms are now regarded as dangerous, and I saw one death follow it. The patient was apparently generally in good condition, but the autopsy showed an aneurysm of the renal artery.

For intravesical technique the Blum operating cystoscope made by Leiter is used and it is an excellent and very simple instrument. The urethoscope of Glinger is a very valuable instrument. It is on the type of the Goldschmidt instrument and consists of open air tubes for the anterior urethra and water filled tubes for the deep areas. It gives a very clear picture, and is particularly useful for work on the ejaculatory ducts. Dr. Glinger is one of the leading authorities of Europe on urethral diseases and his urethral technique is very interesting.

The operating cystoscope of Gaghstatter is not as valuable an instrument as either the McCarthy or the Buerger types, which it somewhat resembles. Phloridzin is still recommended and used by some of the Austrian urologists as a functional test and, while not so very accurate, is not complicated. Pthalein is too expensive, and expense is a thing of great importance in Europe, where the Professor's wife cannot afford the fine toggery of our shop girls, clerks, etc.

The museum of the Allgemeine Krankenhaus and its 4,000 beds (which average daily autopsies numbering 20, every case posted) certainly contains a gold mine of urological as well as general specimens. Prof. Storks' lectures on urinary pathology are well worth listening to.

Can you imagine what 100 per cent autopsies mean to the case student, while we are lucky if we get 5 per cent? This is a subject which is worth thinking about for those who are interested in teaching. Dr. Kroize in his splendid department at the Jubileaum also has a fine collection of specimens and the adjacent city home of 8,000 inmates also provides a lot of interesting material.

For checking hemorrhage after prostatecomy a catheter is passed through the urethra into the bladder, heavy silk is then threaded through the eye and this is in turn made fast to a gauze pad, drawn down into the prostatic area. If necessary to leave for any length of time, another heavy strand of silk is brought out through the suprapubic incision. Some operators use a bag similar to that devised by Hagner. A number of operators use considerable silk as buried sutures, the reason for this being that imported catgut is too expensive and the local product is not of the best.

A very convenient lighting connection for the cystoscope is used in the Vienna clinics by having a small rheostat and lamp connection suspended over the table, balanced by a small weight. When the operator wishes to make his connection, he simply reaches up for his light clip and attaches it to the cystoscope. It also acts as a cystoscopic holder.

The Steinach operation is not discussed in Vienna and as I learned of this early did not mention it in our discussions.

The medical men of Vienna have a difficult time of it as a result of the numerous socialistic measures in vogue, relating particularly to state medicine. In one large hospital the maximum fee which the chief surgeon could charge for an operation was $1.50, and he was a man of great ability. The urologist who has the handling of state cases will often have his clinic crowded with cases, but the fees are so small that he is very glad to give courses in order to help defray his expenses. In view of the progress of socialistic ideas along the lines of state medicine, it well behooves the American physician to keep a close eye on it here. I have been informed that ideas along this line are under way in some of our states already. Conditions in relation to hospitals and in general are slowly improving from the war depression.

It is a beautiful trip of 12 hours down the Danube to Budapest, Hungary, and one is sure of a very pleasant visit in this beautiful and delightful city. It is much frequented by Americans, the hotels are excellent and the food the best to be found in Europe. It provides an abundance in the line of entertainment. Hungary was hard hit by the war, Bolshevism and the Roumanian invasion; the latter stripped the country of most everything, including hospital equipment. Thanks to the good work of the American Red Cross, these conditions were somewhat relieved. The urologic clinic of Prof. Illyes is one of the largest and best in Europe. It consists of about 160 straight urological beds, no acute venereals, and provides one with an abundance of operative and cystoscope material. Prof. Illyes or his assistants will often have about five operations a

day, and considering their great handicaps in the way of equipment, do excellent work.

Malnutrition is common in this section of the world, and as a result there is much gento-urinary tuberculosis. The big feature of this clinic is the splendid work in local and regional anesthesia. I saw many operations here, only one of which was done under general anesthesia.

All renal and urethral operations were done under para-vertebral anesthesia, which must be seen to be appreciated. The anesthetic is 1 per cent novocain. A series of wheals are first made in the intercostal spaces about two fingersbreadth from the transverse process, beginning just below the angle of the scapula, and continuing in the inter spaces down to the last rib. The needle is then carried down to the lower edge of the rib injecting as it goes. It is then turned and gradually forced over to the transverse process, about 5 cc being used. When these intercostal injections are completed a wheal is made just above the anterior and posterior superior spines of the ilium and one just above each of these on a line with the last rib.

Superficial and deep injections of novocain are then made from these points widely. The patient is ready for operation almost immediately. The long oblique kidney incision is used from the angle of the 12th rib and erector spinae down and forward toward the anterior superior iliac spine.

For bladder and prostatic operations, a combined caudal anesthesia and anterior abdominal infiltration is used. Prof. Illyes selects in his abdominal infiltration about nine points on the anterior surface for his wheals. Three in the midline and three at the borders of the rectus as follows: Just above the symphysis at the lower umbilical border and midway between the two, superficial and deep infiltrations are made from these points. The Eastern European has very great respect for bladder distention in prostatic disease and always fills and evacuates the bladder very slowly, indeed. It reminds one of what Keyes used to call decompression and which Bumpus is again calling attention to.

Prof. Illyes uses both a urethral and a suprapubic drain in his prostatectomys. The suprapubic incision is closed with Michel clips up to the drain. The drain is usually removed on the third day with the clips and his wounds are usually healed in about ten days entirely. The urethral drain is left in until the abdominal wound is closed. The position for prostatectomy is always the Trendelenburg, with the bladder evacuated, after it is opened and the prostatic capsule then incised with special knives, which are very useful. The three-bladed retractor keeps the wound open, one sees everything necessary and all additional growths or lobes are handled in a real surgical manner. Bleeders are looked for and ligated if possible. The professor carefully tampons for all bleeding, but says he seldom has to leave a plug in. In one clinic in the United States he stated that attempts had been made to suture over the prostatic area, but there was much danger of infection in this.

Preliminary urethral drainage is also used in this clinic where possible, and where not possible, which was unusual, a two-stage prostatectomy done. Wounds here were all sealed with masticine on the edge of the gauze. It is very good and very cheap there. I saw a great many autopsies in Europe and it is notable that those who had t. b. kidneys also had t. b. of the lungs.

In the large European clinics they often smile when one mentions uretral stricture and, in fact, one man said it was really more of an American disease. It certainly does not appear conspicuously in their *x*-ray plates, of which I saw any number all done by experts, a few suggesting the low type which Hunner speaks of.

We found in Budapest that diathermy was being extensively used by practitioners for the treatment of gonorrhea, but felt it was rather significant that Dr. Picker, who has the big venereal clinic, did not use it. The Budapester studies his cases very thoroughly and uses almost every test except pthalein, but all seem to pin their real faith in cryoscopy as the real test of kidney function. This seemed a far cry, as it had been abandoned here long ago.

Mario Negri, pathologist of the Lavoissiere in Paris, claims that eosinophilia is always present in prostatic hypertrophy and absent in carcinoma. The pathologist at the San Rokus, Budapest, where they always have 30 to 40 prostates, was unable to confirm this.

The physician of Mittel Europa, who works for the Government, is really lucky, in spite of his small pay, as otherwise there would be little between him and starvation. With government control, the hospitals and other state socialism, there is very little left for the poor M. D., and people are beginning to realize that the profession as a livelihood is,—well, not what it used to be. I know medical men who were at one time well to do and are today among the topnotchers professionally, who would fall on one's neck if offered $1.50 an hour three times a week for a course. In Hungary, if the present acts go through, the doctor will have a number of patients to examine, but no one will bring him enough return to buy a newspaper.

The condition of the medical men in Hungary is quite hopeless. All of the prominent medical men of Budapest speak German and there are exceptional opportunities there for the surgical students who speak German moderately well, particularly so in the department of urology.

Berlin has so many interesting urological features that it would be impossible to describe them except in a book. When one goes to Berlin a copy of a little book called "Medical Berlin" will aid him considerably. There is also an American Medical Association there, of which Dr. Lewin, a retired physician, is secretary. He can give out quite a little information about courses, which are nearly all in German, except those of Jacoby in urological surgery at the Virchow Krankenhaus and Eugen Joseph, who can give them in English, German or French.

One striking fact in Germany is that there are practically no separate urological clinics, most of them being subdivisions of general surgery. The private clinics are a different proposition.

Wossidlo, who has charge of the state control of venereal diseases, has a very large amount of material. The father of the present incumbent in office devised an urethroscope which gives an excellent field, but really the field is a bit large and allows too much bulging for those who are less experienced than he, but he certainly brings out the picture most beautifully. One sees in his private clinic a great variety of urethral and vesical lesions. Wossidlo uses diathermy in the treatment of late gonorrhea, but apparently it requires considerable experience and might cause a lot of trouble in the hands of the

novice. His experience is very great and his new edition on gonorrhea is a very valuable contribution. His cystoscopic atlas is beautiful and both should be in the hands of every man who can read a little German and practices urology.

This widely experienced operator in common with many Germans is not very hopeful as to the treatment of malignant disease of the bladder and prostate.

Prof. Josephs is greatly interested in the study of malignant disease and had been an advocate of extensive resection in these conditions, reporting a number of apparent successes. He is now treating his cases with trichloracetic acid and hopes for the best. I was rather startled by the number of people who were skeptical of surgical results in urinary malignancy. Josephs has many interesting pyelograms and is using as a medium umbrenal, which is really lithum iodid. It gives excellent pictures, but would be expensive in this country. Josephs, in common with many other urologists, has been working on a sterilizable cystoscope, but why they need such a thing in Europe was not apparent.

Josephs' chromocystocopy tablets are a valuable contribution. His book on cystoscopic technique is well worthy of him and is excellent.

In looking around Berlin one finds considerable interest manifested in the removal of ureteral calculi by catheter manipulation, in fact, it is being attempted almost everywhere, notably by Casper and the Isreals.

The former uses glycerin internally in the doses of one drachm every few hours and thinks it helpful. (This was advocated here some years ago in the treatment of biliary calculi.) They use it in connection with the local treatment, which consists of passing an olive tip by the obstruction if possible and then injecting olive oil and attempting to dislodge the stone, or draw it down to the ureteral orifice. If the obstruction cannot be passed, the olive oil is slowly injected up to the stone and attempts made to dislodge it. With the catheter some operators use the very ingenious ureterel probang, modelled after the esophageal probang. When the stone reaches the meatus difficulty is often encountered and this is overcome by the use of the cystoscopic shears or the diathermy sound.

These treatments sometimes extend over long periods, but it is certainly an improvement over an open operation on the ureters. As one of its advocates remarked, scar tissue was just as much to be avoided in the ureter as in the urethra, and it is always fraught with danger in a tube of small lumen, particularly so where there is trouble on the other side.

Pneumo-roentgenology has apparently began to take quite a hold in Germany, largely due to the work of Paul Rosenstein. His plates depict the kidneys well and even the suprarenals are visible. He uses filtered oxygen and injects about 500 cc. into the region of the renal capsule. His technique is much like that of Carreli and Gardano of Buenos Ayres. It makes a splendid picture, but the possibilities of complications will restrict its use, certanly in this country. Rosenstein says hs method s painless except in the presence of adhesions and where pain is caused it should be stopped.

Rosenstein is a great advocate of anterior pyelotomy. He says there is less hemorrhage, better approach, better drainage and less liability to fistula.

Ringleib, the cystocopic genius, can always be depended upon to show something new and clever in his line. His latest is the dark field illumination of the bladder. The shadow lamp seems to concentrate sharply on one point. He brings the lamp close to the bladder floor and the visual end as close to the affected side as possible, then raises up the sight. The ureteral orifice is viewed in profile and the rest of the bladder seems to be in a deep shadow. By this means he is enabled to detect small particles of pus emerging from the ureteral meatus. The principle is similar to the dark field illumination that we use for treponema.

He also uses what he calls color filters and his cystoscope is slit so as to receive them. These windows are near the eye piece and the filters are of a greenish gelatiny substance. It would seem to give the bladder a slightly greenish tinge, but the professor calls it daylight. The vessels have a decided black appearance and he states this has been found particularly valuable in the recognition and treatment of certain forms of cystitis. I confess I could not grasp it, but as the author is such an eminent authority on this subject, we will probably hear more of it later.

In Berlin one hears much discussion on the subject of the relationship of aberrant vessels as a cause of hydronephritic conditions of the kidney. It seemed to be the opinion of a number that the misplaced vessels were misplaced by the mass, and not the mass caused by the vessels blocking the ureter. I think the opposite opinion usually holds there.

Prof. Baetzner of the Bier clinic has contributed much to urology and is greatly interested in it. Most of his urological surgery is done under spinal anesthesia. His recent work on the diagnosis of surgical diseases of the kidneys is a valuable contribution and an excellent companion to Joseph's cystoscopic technique. Prof. Baetzner believes in cryoscopy and also in the electrical conductivity of the urine as a functional test of value. The Bier clinic is a wonderful aggregation of very skillful young men and it impresses one very much by its excellent discipline and military conduct. Before the war a professor in an European university was a man of great standing and certainly had a proud position to look forward to and work for. Those days, unfortunately, are passing.

Blood chemistry I did not see used in any European clinic that I visited and I was surprised that the recent text books on hematology hardly mention it.

In Europe I was greatly impressed by the fact that suprapubic prostatectomy is a real surgical procedure and not the crude proposition we see too often on this side.

One will find a wonderful array of urological instruments in Germany. The Young instruments were very noticeable and I was told that several prominent workers were using his cystoscopic lithotrite. I rather liked the Lothstein lithotripser. This instrument is introduced with the beak up, the periscope is then introduced with lens down, the stone located and the jaws gradually brought around until it picks up the stone. I believe this is a coming operation with the improved instrument. The Zeiss, Wolf and Kollmorgan cystoscopes have wonderful lens systems and are excellent for ureteral work, but they, unfortunately, cannot be used to observe and

(Concluded on page 70)

Potentiality of Treatment and Instruction in Long Standing Deaf-mutism

E. M. JOSEPHSON, M.D.,
New York

It has been the custom in our institutions for the deaf-mute to place the individual cases in a single category and to treat them as a group. The absolutely deaf, those who have no vestige of air or bone conduction of sound, and those who have bone conduction or both bone conduction and a markedly limited air conduction (to a degree so high as to preclude placing the case in the category of "hard of hearing") are usually regarded in the same light and handled in the same manner.

To be sure, most of the institutions devoted to this type of work place the individuals under proper otologic care but rarely are the cases classified, separated and dealt with according the otologic findings. As a consequence, the level at which treatment and instruction are aimed has not been higher than that which would benefit the average or sub-average case, and has usually been limited to the instruction of lip reading articulation and vocalization by imitation.

The following case illustrates the error consequent upon this method of handling the deaf-mute and indicates the potentiality of adequate and well directed treatment and instruction in cases diagnosed as deaf-mute.

Miss C—— H—— was a young, fairly developed girl 18 years of age, and for the past 13 years had been an inmate of one of our leading institutes for the deaf-mute. During the past year she grew despondent because of her inability to hear and speak, threatened to commit suicide, and attempted it.

In an endeavor to improve her condition her parents brought her to the writer.

Her history was briefly as follows: She was the first child of a consanguinous marriage in a family in which there is much aural disability. At the age of 17 months she was able to speak one word. Shortly thereafter she had a bilateral attack of otitis media complicating measles. From that time onward she had intermittent attacks of otitis media. At the age of 3 years her tonsils and adenoids were removed, and at the age of 4 years she had a left mastoiditis which was operated. From the date of her first attack of otitis media the patient showed no signs of hearing and gradually lost the ability to say the one word which she had learned. At the age of 5 years, she was pronounced totally deaf by a distinguished otologist, upon whose advice she was placed in a deaf-mute institution.

On physical examination, her general condition was found to be normal. Her oto-rhino-laryngologic was as follows: Pharynx and larynx were normal, but patient had very little control over her tongue musculature. Nasal septum markedly deviated, obstructing both nasal passages. Over left mastoid was the scar of a mastoid operation. The tympanic membrane of the left ear was perforated, the malleus and remnant of the membrane markedly retracted and the tympanic cavity dry and lined with epithelium. The right ear showed a retraction of the malleus and drumhead of high degree and immobility of the ossicles was determined with the Siegel otoscope. Posterior rhinoscopy revealed an extraordinary hypertrophy of the cartilages at the mouth of the Eustachian tube on both sides.

Hearing tests gave the following results: The patient could hear neither whispered or spoken voice, or any of the range of tuning forks placed close to her ear. For all practical purposes she was totally deaf. By bone conduction she could hear in both ears the tuning forks C to c^3. Upon inflation by Eustachian catheter the patient was able to discern the note c^3 in her right ear. The vestibular apparatus gave a normal response to stimulation.

The patient was able to read the lips of persons with whom she was familiar, but not accurately. She was able to utter only one sound—"a" and its variations, was able to read, and had an education the equivalent of the fourth year grammar school.

The patient was placed on mixed treatment, ears inflated regularly three times a week by Eustachian catheter, and the ossicles of the right ear mobilized by means of massage with the Siegel otoscope and by suction. Three weeks after the beginning of treatment, a submucous operation was performed to correct the septal deformity.

It was found at the first examination that the patient had no control over the muscles of articulation. The tongue was large and flabby, and was invariably held in one series of positions in attempts at articulation, which always resulted in the sound "a." Though not "tongue-tied," the patient, except with great effort, could not even protrude the tongue from her mouth. To correct this lack of muscular control the patient was given daily tongue exercises and instruction. At first, simple tongue movements were tried, then articulation of the individual vowels and consonants was laboriously and carefully taught her, and later syllables and words. The letters "l" and "i" presented especially great difficulty and many hours of training were required to teach the patient to pronounce them with precision.

Not the least difficult feature of the treatment was the psychic control of the patient. She was very shy, timid and self conscious, and was ashamed to make an effort at speech for fear of making an error. This diffidence was combatted with at every turn, and especial efforts made to inspire the patient with self confidence, which in individual instruction is fortunately a simple matter.

The oto-rhinologic and medical treatment, persisted in, gave unhoped for results. The patient's range of hearing in the right ear gradually widened, until several weeks after beginning the treatment, the patient could hear by air conduction the entire range of tuning forks c^1 to c^5. The higher tones were, however, always the more audible. Hearing of the spoken voice was also gradually secured, earlier with sound amplifying apparatus and later with the naked ear. In the early stage, that which the patient heard was merely recognized by her as sound; but as she later began to make these same sounds herself, she began to recognize them. On the other hand, the improvement in hearing helped to stabilize articulation and phonation. Memorized poetry was used to fix in the patient's mind the word sounds and their spoken qualities.

At the end of three months, the patient's hearing was about 30 per cent. normal, and her speech about 20 per cent. The patient was then ordered to return to school, primarily for the purpose of learning grammar and expanding her vocabulary; for as her vocabulary would increase, her hearing would improve. When seen by me about 6 months later, the patient showed even further improvement. Her hearing might be rated at about 50 per cent. and her speech at about 80 per cent. efficient. Increase of auditory acuity and in powers of speech had interacted in producing this satisfactory result.

Summarizing, the patient who had been both mute, and for practical purposes, totally deaf for 17 years of her life, gained both hearing and speech by means of careful and well-directed individual instruction and treatment. (It might be mentioned in passing that the writer has found it possible, even in cases in which air conduction is totally and irretrievably lost, to gain speech and hearing by means of a specially devised apparatus). It is possible that a fairly high percentage of the cases of deaf mutes might be similarly helped.

230 E. 79 St.

Oral Infection by Vincent's Organismus

P. R. Stillman and J. O. McCall of New York say: It is most common in those whose mouths are neglected. Cigarette smokers seem particularly susceptible. Syphilitics are likewise extremely susceptible, although the infection may occur without association with this disease. This fact is mentioned because so many patients manifesting Vincent's infection have been improperly suspected of having specific disease. It is, nevertheless, true that antisyphilitic medication, especially Salvarsan, is effective in its treatment.—(*N. Y. Med. Jour.*, Aug. 1, 1923.)

The Physician's Library

Genito-Urinary Diseases and Syphilis—By Henry H. Morton, M.D., Professor in Long Island College Hospital, Brooklyn. 5th Edition; 328 illustrations, 38 full-page plates. New York: Physicians & Surgeons Book Co., 353 West 59th Street. 1924.

This book represents the experience of many years of one of the country's best-known urologists. There are books and books on this subject but it is doubtful if any author has presented one which more thoroughly represents the subject, at least so far as the general practitioner desires to know it. It would seem that the gifted author had kept the needs of the family physician fully in mind when he set forth the various subjects portrayed therein.

It has been our pleasure to review other editions of this book. This one, however, is without doubt the crowning gem in the diadem for the reason that it covers a wider range of topics and, having been to a large extent rewritten, has been brought up to the minute and contains the very latest thought in the subject.

It would be futile to bring out any particular points regarding this volume in the short confines of a review. Needless to say, Dr. Morton is at his best and he has the cooperation in this edition of his associates on the faculty of the Long Island College Hospital: Drs. Archibald Murray, Carl H. Laws, A. L. L. Bell, Alfred Potter, Louis C. Johnson and Albert M. Judd, all of them well-known specialists in various lines, and each one of them contributing some phase of his own work as it is connected with venereal diseases and syphilis. The practitioner who wishes for his daily use a book which will be of inestimable value should forthwith purchase this book. It is a worthy emanation of a very high-type urologist.

Gynecology—By William P. Graves, M.D., of Harvard Medical School. 3rd Edition, 936 pages with 388 half-tone and pen engravings and 146 microscopic drawings, 103 of the illustrations in colors. Philadelphia and London: W. B. Saunders Company, 1923.

The third edition of Graves' Gynecology appears with over two hundred changes in the text. The author has introduced a number of new features, has described new operations, has particularly brought out material on ovarian tumors and operative procedures and has made his book even better than its two predecessors. Much can be said in a textbook through the illustrations and this holds particularly good in this instance. Very few books have been better illustrated than this present edition.

Physical Diagnosis—By Richard C. Cabot, M.D., Harvard Medical School. 8th Edition, 279 illustrations, 536 pages. New York: William Wood & Co., 1923.

Admirers of Cabot, and they are very numerous, will be interested in the eighth edition of this well-known book. It is an eminently useful publication because it is concise, to the point, and is sufficiently practical that one may read it without being lost in a maze of verbosity. The book is Cabotesque, which means that it is mighty good reading.

Selected Essays on Orthopedic Surgery—From the writings of Newton M. Schaffer, M.D. 636 pages. New York: G. P. Putnam's Sons, 1923.

This is a collection of previously published essays and lectures delivered by one of the country's most distinguished orthopedic surgeons. Having been published before, they present nothing new, but the great value is in their collection in one volume so that they may be preserved. From the orthopedic standpoint, these essays are classics and they represent the best thought in this line of endeavor. A not unpleasant feature are the forewords by Dr. Robert W. Lovett, of Harvard Medical School, and Dr. Edward D. Fisher, of New York University. Then there are comments on certain of the essays by Dr. Frederick J. Cotton, of Harvard, Dr. John Joseph Nutt, Surgeon-in-Chief of the New York State Orthopedic Hospital, and Messrs. George Blagden and Henry W. Hardon, trustees of Dr. Nutt's institution.

Obstetrics and Gynecology—By J. M. Munroe Kerr, M.D., of University of Glasgow, James H. Ferguson, M.D., University of Edinburgh, James Young, M.D., University of Edinburgh, and James Hendry, M.B., of University of Glasgow. 1066 pages. New York: William Wood & Co. Edinburgh: E. S. Livingstone, 1923.

The four authors of this volume have combined two great subjects and, as a result, have presented a work which will long stand as representative. It includes the anatomy and physiology of the parts in which the reader is interested; normal pregnancy; the pathology of pregnancy; normal labor; abnormal labor; puerperium; infant feeding; obstetrical operations; gynecology and gynecological operations. These subjects have been treated exhaustively and they have an added interest in that this work has been done by men brought up in schools other than those of our own and who represent, perchance, a different viewpoint. The book is a very welcome addition to the literature on this subject.

Diseases of the Skin—By Richard L. Sutton, M.D., University of Kansas. 1214 pages, 1080 illustrations. 5th Edition. St. Louis: C. V. Mosby Co., 1924.

It seems but a short time ago that the fourth edition of this outstanding dermatological work was reviewed in these pages. In the intervening time there has been much progress in dermatology, all of which is fully recorded by the author. In many ways Sutton's book may be regarded as the premier of the works on dermatology. Not only does he give the reader a wealth of illustrations with illuminating text, but he goes into literary references minutely. This edition contains six hundred more than the previous edition and there is no difficulty in finding what one would desire regarding any dermatological condition by referring to these references.

Endocrine Diseases—By Wilhelm Falta, M.D., of Vienna. Translated by Milton K. Meyers, of Philadelphia. Third Edition. 104 illustrations. Philadelphia: P. Blakiston's Son & Co., 1923.

The fourteen chapters of this book are devoted to diseases of the thyroid, parathyroid, thymus, hypophysis, epiphysis, suprarenal apparatus, sexual glands, insular apparatus of the pancreas, pluriglandular diseases, cretinic degeneration, vegetative disturbances not depending directly on diseases of the ductless glands, and the different forms of obesity. A feature is the writer's careful attention to the anatomy and embryology of each subject, together with a very excellent reference system. Those interested in endocrinology will find a wealth of material in this book.

Mental Disorders—By Francis M. Barnes, Jr., St. Louis University. 2nd Edition. 295 pages. St. Louis: C. V. Mosby Co., 1923.

This book grows out of two others—The Introduction of the Study of Mental Diseases and Notes on Mental Diseases. It is intended for medical students and it gives them a very excellent idea of a rather abstruse subject. Barnes treats these various conditions interestingly and we feel that physicians as well as medical students will find something of value within the pages of this little book.

Heart Trouble—By Louis Faugeres Bishop, M.D., New York. 422 pages. New York: Funk & Wagnals Co., 1921.

When a physician has any obstruse heart condition that is puzzling and he lives in the neighborhood of New York, the chances are that the case will be referred to Dr. Bishop. In this little book he tells all about heart troubles and how to prevent them, as well as how to treat those which one has at hand. It is interestingly presented and should be of value to practitioners.

Rejuvenation—By Dr. Paul Kammerer, of Vienna. Preface by Dr. Harry Benjamin, of New York. 249 pages. New York: Boni & Liveright, 1924.

Physicians interested in the prolongation of human efficiency by the Steinach method will be interested in perusing this volume. Kammerer has collaborated with Steinach and it was at the latter's suggestion that the book was published. It is of value to those who would know more about this matter on account of its exhaustiveness and its excellent bibliography. Whatever one's opinion may be on this subject, one would do well to read the ideas as set forth herein.

Colonic Therapy in the Treatment of Disease—By O. Boto Schellberg. 202 pages. New York: American Institute of Medicine, Inc., 1923.

Some physicians have not yet given sufficient attention to colonic therapy, not only to the therapy itself but to the absolute necessity therefor. In these days when focal infection is commencing to be understood and appreciated, we learn that a focus need not necessarily be in the gall bladder, or in the teeth, or the tonsils, but that it can very well be in the intestinal tract. We have learned that enemas are of no lasting value and, indeed, may give rise to serious difficulties when persisted in.

We have found that focal infections of the intestinal tract give rise to a wide variety of difficulty, including oral and

tonsillar conditions, joint affections, arteriosclerosis, and a great variety of conditions which have been wrongly laid to different causes. Experience is teaching the medical profession that the cleansing of the intestinal tract and keeping it clean is one source of preventive medicine which is bound to have far-reaching results.

Mr. Schellberg is a pioneer in this work. Working entirely in conjunction with physicians, he has brought about changes in the body which have been little short of marvelous. Working along distinctive, physiologic lines, he has shown us a new light.

This book, which is splendidly written and finely illustrated, is the result of a persistent demand on the part of the profession for more information on the practical side of colonic therapy. Mr. Schellberg has made his volume very comprehensive, starting out with the biology of the alimentary canal, dipping into anatomy, physiology and bacteriology, then presenting the technic of colonic irrigation and going into details on the use of antiseptics and bacterial implantations. He demonstrates the serious consequences attendant upon fecal stasis and shows how a perfect colonic drainage can result in the cure of many uncatalogued abdominal ills.

The book opens up a new realm and is most heartily recommended to the medical profession. If the standards laid down are carried out, a tremendous amount of good will result.

It is very obvious from a careful reading of Mr. Schellberg's treatise that colonic therapy opens up a new specialty to the medical profession. Indeed, Mr. Schellberg is very emphatic in his belief that this work should be done by doctors alone. In many cities there are ex-nurses, ex-orderlies, etc., who give what is known as colonic irrigation but which is nothing more than the usual high enema. They are not scientific and they oftentimes do far more harm than good.

Physicians who are interested in establishing an office practice could do very well to investigate thoroughly the opportunities offered by this new and hopeful method of relieving the ills of mankind.

Public Health

Veterans Fight "Dope"

At bitter war is being waged between officials of the U. S. Veterans Bureau and members of "dope" gangs who are living off the war earned compensation received by disabled ex-service men.

"I have instructed all employees of the U. S. Veterans Bureau to give every assistance to the narcotic forces of the Government in hunting out and running down these arch criminals who thrive on the blood and strength of their fellow men" said General Frank T. Hines, director of the U. S. Veterans Bureau today in disclosing the recent results of the Bureau's war on dope peddlers and dealers.

During the last forty days more dope peddlers and dealers have been apprehended in the San Francisco District than during the previous six months. "Thanks to the cooperation of the officials of the 12th District of the U. S. Veterans Bureau," declared Harry D. Smith, narcotic agent in charge of the California District.

Since the opening of the drive in August thirty-five peddlers, including four dealers, and over $12,000 worth of morphin, cocain and heroin have found their way into the net of the Government forces in the San Francisco District. One dealer has been sentenced to seven years on McNeil's Island and two peddlers have received lesser sentences. Thirty-seven cases are now on the docket with the dopsters either in jail or out on heavy bonds ranging from $5,000 to $15,000.

The medical personnel of the U. S. Veterans Bureau, working in Veterans' hospitals, throughout the country, to restore health to the shattered bodies and minds of America's disabled former service men, have long realized that among their most deadly foes were those who sold pain deadening but body wrecking narcotics to the patients. There is probably no hospital in the country but has had its parasitic gang of dope peddlers and dealers.

It is an admitted fact among the medical profession that months of good medical treatment can be destroyed in a single day's contact by a patient with dope or liquor. To succeed in the battle for health necessitates the eradication of these outside damaging forces.

It is with this end in view that the Veterans Bureau Officials, not themselves under any duty to act as assistants to the federal narcotic and prohibition forces, have undertaken to aid in the fight.

Major Louis T. Grant, Manager of the 12th District, U. S. Veterans Bureau, stated that "a moral obligation rest upon the officials of the U. S. Veterans Bureau to protect ex-service people from the ravages of the dope habit regardless of whether they are in Government hospitals, receiving vocational training, or receiving compensation. It is our business to see that assistance provided by the tax-payer for disabled veterans is not appropriated by drug peddlers" he declared.

Juvenile Delinquency

For the information of those engaged in or interested in child welfare work, attention is called to the report which has just been published by the Children's Bureau, Department of Labor, entitled "Juvenile-Court Standards." This report outlines standards by which juvenile courts can measure their work.

"Report of the Committee Appointed by the Children's Bureau, August, 1921, to Formulate Juvenile-Court Standards.

"Adopted by a Conference held under the Auspices of the Children's Bureau and the National Probation Association, Washington, D. C., May 18, 1923."

Juvenile Court procedures concern multitudes of lives in their formative period. The court has before it youth in its vigor, with its primordial tendencies. The delinquent child stands there conspicuous by his misconduct and must be restained.

One of the recurrent problems in dealing with the delinquent is how far is the individual to blame, and how far is society responsible?

"The child is clay in the hands of the human potter." What he will be depends largely upon the wisdom and skill of those who mold him. Quoting Doctor Smith, Department of Sociology and Anthropology, University of Minnesota, "The inquiry into the conduct of the child on the part of the public authorities should resemble as much as possible the inquiry of wise fathers. For the delinquency of nearly every child some one else is responsible. The child being different from the adult, both himself and his deed belong to a different classification. Delinquency in the child is therefore evidence of insufficient socialization. * * * The social problem still remains the proper development of the normal child."

Reverend Nehemiah Boynton in a recent sermon said: "We have no sympathy with that continual controversy between age and youth in which age so often assumes that youth has lost its traditional virility and is deteriorating. There is a type of youth of which this is true, but that type is not universal."

The interesting report on Juvenile-Court Standards indicates that we are moving in a desirable direction. It shows a possibility of uniform understanding and a steadily growing recognition that juvenile delinquency is intimately interwoven in the whole fabric of human society. It points out the steps requisite for its betterment.

Where Does Health Education Begin?

The man in the car stopped to look at the good-looking farm. The fields were yielding large crops; the stock was in fine condition. Well-made sheds housed the newest and most efficient farm machinery and an auto for travel.

"How many pigs have you?" asked the traveler.

"Just a hundred and nine," said the farmer. "That boar over yonder took first prize at the county fair. He's a full-blooded Duroc."

"You certainly know how to raise pigs, Mr. Farmer."

"I ought to; I've sure made a study of raising hogs. You have to get good stock and then raise them right."

"I suppose anybody could raise corn around here," ventured the traveler.

"Anybody that's a mind to learn how and willing to work. You have to *know how* to raise corn; you have to know about the soil, and the seed, and how to raise the crop. I've got the best machinery anywhere around; and it pays. A man can't afford these days to buy inferior stock or tools; and then he's got to keep everlastingly on the job."

A child came running out into the yard, brown as a berry, but thin and sleepy looking.

"How many children have you?" asked the traveler.

"Nine!" replied the raiser of prize pigs. "Some family, eh?"

"And I suppose you and your wife have made a study of how to raise a prize family of children?"

"Now you're kiddin' me! I reckon what's good enough for their dad is good enough for them."

"But *is* it? You don't expect your small pigs to eat what your big hogs eat. You don't make prize hogs that way. When you're growing a prize pig you don't say 'It's going to get no more than its mother had,' but *'What does this pig need?'*—and that pig won't get it unless you give it to him. You know every point of a prize hog; do you know every point of a prize 6-year-old girl or boy? Or a 10-year-old? Or a 2-year-old?"

"'Pears as if it's goin' to rain," said the farmer. "I'll have to be getting the cultivator under the shed. It's new this year and I don't want it to get wet and rust. If you want to keep good machinery you just have to take care of it."

The Medical Times

A MONTHLY JOURNAL
OF
Medicine, Surgery and the Collateral Science
ESTABLISHED IN 1872

EDITED BY
H. SHERIDAN BAKETEL, A.M., M.D., F.A.C.P.
ARTHUR C. JACOBSON, M.D.
Associate Editor.

Contributions.—EXCLUSIVE PUBLICATION: Articles are accepted for publication on condition that they are contributed solely to this publication.

When authors furnish drawings or photographs, the publishers will have half tones and line cuts made without expense to the writers.

SUBSCRIPTION RATES
(STRICTLY IN ADVANCE)

UNITED STATE. . . . . (Including Alaska, Cuba, Mexico, Porto Rico, Hawaiian and Philippine Islands)	$2.00 per year
CANADA	$2.25 per year
FOREIGN COUNTRIES IN POSTAL UNION . . .	$2.50 per year

SINGLE COPIES, 25 CENTS

Definite written orders for THE MEDICAL TIMES are required from all subscribers, to whom the journal is thereafter regularly forwarded.

Notify publisher promptly of change of address or if paper is not received regularly.

Remittances for subscriptions will not be acknowledged, but dating on the wrapper will be changed on the first issue possible after receipt of same.

All communications should be addressed to and all checks made payable to the publishers.

MEDICAL TIMES CO.
ROMAINE PIERSON, *President*
H. SHERIDAN BAKETEL, *Treasurer*
GEORGE B. CREVELING, *Secretary*

25 Nassau Street - - - New York

NEW YORK, MARCH, 1924

A Book to Read

Professor Ernest H. Starling's book, The Action of Alcohol on Man, seems to have produced a great deal of agitation among those of his colleagues who are of the bone-dry persuasion and who profess to believe that in no circumstances is alcohol ever anything but a harmful substance. The trouble, of course, is that Starling has told the whole truth about alcohol, which is anathema in the sight of the fanatics.

Significantly, it is in England that the book appears. It is still safe in that part of the world to set forth the virtues and values of alcohol. Our own cautious medical scientists of rank equal to Starling are not writing treatises on alcohol in these days.

All of which recalls the words of Havelock Ellis: "The terrible results of alcohol are described, but it is not pointed out that the chief factor in such cases has not been the alcohol, but the organization on which the alcohol acted. Excess may act like the lighted match, but we must always remember the obvious truth, that it makes a considerable difference whether you throw your lighted match into a powder magazine or into the sea."

The Ideal Pediatric Department of a General Hospital

Dr. T. Daugherty, Medical Superintendent of the Jewish Hospital, in Brooklyn, thinks that the ideal pediatric department of a general hospital should be in a separate building and have its own staff of interns. These interns should themselves do all the bacteriologic and pathologic work of the institution, at the same time that the hospital laboratory proper does it for purposes of comparison. The interns should also make up the feeding formulas themselves. The idea, of course, is to turn out thoroughly trained pediatricians. Men could probably be more easily obtained for a pediatric service than for any other special line of institutional work.

The pediatric building should conduct its dispensary upon the ground floor, with entrance and exit at respective ends. Upon the second floor would be the over-night and short-stay patients, such as tonsil, adenoid and phimosis cases. Above this floor would be the cubicles for patients in quarantine previous to regular hospitalization. On the fourth floor would be the "permanent" quarters, while the solarium and physiotherapy department would be on the topmost story of the "sky-scraper."

The central corridors of this rectangular building would be glass-enclosed, so that relatives in passing through would see their children, this arrangement permitting visitation and the minimizing of solicitude without the perils of conventonal methods.

There are many other details in Dr. Daugherty's interesting scheme, but we have briefly described the essential features.

The pediatric staff should sustain an advisory capacity toward all children under twelve in the general service of the associated hospital, including the obstetric division.

Where should this pediatric supervision begin? It should start with the child before he is born; in other words, during the pre-natal period; there should be a definite, not a loose, linking-up between the pediatric, the general, and the obstetric services.

Let us hope that Dr. Daugherty's dreams will be finally realized, and very soon. Such a plan as his makes the crudities of the present order of things in our general hospitals stand out in all their unseemliness. Yet it is the fashion of philanthropists to vaunt their achievements to date in behalf of sick children in general hospitals, as though the last word had been spoken.

A Painless World

The slightest pain, to-day, calls for the exhibition of some relieving drug. The most minor surgery is too often the excuse for anesthesia.

Terror and great suffering must be assuaged, and our anodynes and analgesics and anesthetics all have legitimate and well understood indications.

But apart from this there is unquestionably a degeneracy manifesting itself in part as a lack of fortitude in the presence of pain which was not at all characterstic of our sturdy forefathers. Fortitude was a virtue to the Ancients, but any marked exhibition of it to-day would elicit wonder and misjudgment.

Some of the jazz cults make a pretence of fortifying their dupes against pain, but they are all sorry substitutes, from a medical standpoint, for the old-time religious props of prayer, faith, and the immanence of God Himself. Such props are largely gone, the cults are frauds, and degeneracy is full upon us—therefore the drugs and anesthetics.

An interesting question bobs up at this point. Has the introduction of and widespread resort to anesthetics been responsible for decadence with respect to fortitude, or were anesthetics discovered and applied just in time to aid a race that was becoming degenerate? Even if not primarily responsible, have not

anesthetics indirectly helped to destroy stamina already weakened by other factors? Has there not been a vicious circle established?

To say that highly civilized peoples have developed keener sensibilities as a necessary accompaniment of evolution is not necessarily to disprove the thesis of biologic degeneracy. Our vaunted civilization is by no means an unmixed blessing. Certainly we pay some price for every "advance."

Is not success in relieving all pain tantamount to the nullification of qualities not attainable except through pain? If we could evade all griefs, all dangers, all risks and all strains, would we be better men and women?

It may be fortunate that natural limits are always set to the realization of so-called ideals.

A Unique and Attractive Plea

Dr. Eugene Lyman Fisk, speaking recently before the Teachers' Institute of the Manhattan Training School, said that it is possible to save enough lives under ten years of age to make this country entirely independent of immigration.

"It is possible to build a race in this country that will develop its resources without man-power from foreign parts. It is possible to cut the sickness rate in industry to a point that will fully compensate for absolute closure of our doors to foreign labor. There are now means available for bringing practically the whole population under a life-lengthening and health-building system that will give us world leadership in the fight for human happiness and freedom, the only kind of freedom worth having, physical and moral freedom, without which political freedom is meaningless."

It is because of immigration that we have not cleaned house. The salvage of our own children has not been imperative, since Europe has sent us hordes to replace the damaged and the dead. It would seem that economic, rather than spiritual and affectional and scientific factors, have determined our social methods. The complete shutting down of immigration is apparently the only thing that will compel us to apply the wholesome teaching of Dr. Fisk. Then we would have to clean house.

A Type

A curious and not uncommon type observable among our ranks is found exemplified in the individual who talks and writes surpassingly well on technical subjects related to whole masses of people, but becomes a deplorable figure when a concrete case or even a mass situation is to be *acted* upon. He is a wonder in the abstract, and another kind of wonder in the concrete. He is a good deal like the social idealist who never gets very close to his neighbor or to the man in the street.

Such an individual is wholly deceptive until practical tests happen to occur. Then, very often, the degree of clinical helplessness that is painfully revealed is almost incredible. One is made to wonder how such a physician could have spent six years in a medical school and hospital and have been "at large" for a decade or more without developing more diagnostic and therapeutic ability than he possesses. His knowledge is great, but he does not know how to apply it to the individual, or to the mass, either, for that matter. It is probably his very shortcomings which lead him into the shining paths that he pursues.

Suspect the surpassingly good talker and writer until you have tried him out in practice.

It is true that there are versatile men who seem easily equal to the most varied demands upon their extraordinary talents, but they are so rare as not to invalidate the point of this editorial.

It may be argued that the men in question serve valuable purposes in the field exploited by them. Nevertheless, for the men who are capable of applying their knowledge but who are not such good talkers or writers we have a different and a warmer feeling.

Miscellany

CONDUCTED BY ARTHUR C. JACOBSON, M. D.

A Fatal Fault in the Teaching of Therapeutics.

The freak cults and systems maintain a constant guerilla and sniping warfare against the regular profession of medicine, and it cannot be said that we have been, as yet, brilliantly successful in meeting the issue raised by these challengers. Both our strategy and tactics have been stupid.

We have talked a great deal about educating the public in medical matters, and we have even tried to put such a policy into effect, apparently believing that such a method would really go far toward remedying matters. Aside from the fact that nothing but years of intensive training can create the professional point of view—which is what we absurdly expect of the laity—we have forgotten that we ourselves are not well educated with respect to first-hand knowledge of the freak systems.

What is needed is not so much medical education of the public—which is not really feasible—as education of the profession itself looking to a better understanding of the jazz cults.

It will probably be conceded at the outset, without acrimonious debate, that the average doctor knows little or nothing about the principles and methods of the irregulars. To the layman he must appear ignorant and stupid; actually, he is both.

It is this ignorance of the freak systems on the part of the practitioner of medicine which accounts for the fascination felt by the individual when he comes, directly or indirectly, under the magic spell of the mystical gentry who are the exponents of these systems. They possess special knowledge—knowledge of healing which even the medical profession lacks!

Suppose it were known to the laity that the education of the physician included a thorough-going, first-hand knowledge of the freak cults—would not the fascination exerted by the quack cease to operate in its unique manner?

The fact that all this quackery exists constitutes an opprobrium on medical education. It is silly to denounce it as a public evil for which we are not responsible, or to attempt to suppress it by strong-arm methods; and it is more than silly to hold the intelligence of the layman wholly at fault. The man in the street cares nothing about our intolerant creeds.

Does an engineer's knowledge of faulty or fake methods of construction lower his technical or social caste or injure his professional morale in any way? Can our guardians of law and order functionate efficiently without detailed and expert knowledge of the underworld and its denizens?

Only the physician, it seems, is expected to pass through the world and do his work in a state of su-

preme innocence, as he is also expected to be above the operation of economic laws as shown by the enormous amount of free service rendered by him to the sick poor of every community, in and out of hospitals. Speaking of freaks, who has anything on the present-day doctor?

It is not to be forgotten, either, that the gods have not designated us as the sole repositories of therapeutic truth.

The remedy, as we see it, is the expansion of the chairs of therapeutics, in our Class A medical schools, to include associate professorships whose incumbents would make a special study of the freak schools—at the schools.

This should be a required senior subject. Such teaching, it goes without saying, should not be bigoted. The associate professors should be selected from among those distinguished for fairness and enlightenment. It would be much like teaching the truths of sex in the home circle, instead of allowing the adolescent to acquire such knowledge haphazardly in the streets.

In addition to teaching by the aforesaid associate professors there should be clinics and lectures in the regular schools, constituting brief intensive courses, to be conducted by the leading exponents of the freak systems.

Not long ago, Professor George Dock of the Washington University of St. Louis made a first-hand study of the freak schools. His observations and conclusions were reported in the *Journal of the American Medical Association*. They were most interesting and illuminating. It stands to reason that the students of Dr. Dock will go out into the world of medical practice more enlightened in this specific field than others.

Dr. Dock's researches were voluntary. We are merely proposing that other men of his high standing be assigned to similar duties and required to pass their information and impressions on to younger minds, as a matter of general and protective culture.

Is it not regrettable that the cultured physician of to-day should have to appear in a guise which to the world spells prejudice founded upon ignorance, and is it not absurd that our enemies should survive because of our own stupidity?

—*Treatment*, Dec., 1923.

Asthma

(Concluded from page 55)

Many asthmatics have nasal polyps and are greatly benefited by their removal. But not all cases of nasal asthma have polyps, nor do all individuals with polyps have asthma. Any condition that interferes with the proper drainage of the nose and more especially those causing congestion or disease of the ethmoids may cause asthma.

I wish to call attention to another method of treatment of the ethmoid region beside the use of cotton saturated with 10 per cent. argyrol. For the past ten years I have injected fluids beneath the middle turbinates and into the olfactory slit by means of a long, nozzled syringe. These solutions remain for a long time because of the capillary attraction of these narrow spaces. Possibly pledgets of cotton are better and I shall give them a trial.

Dr. John J. Daily, McAdoo, Pa.: In the vicinity where I live, the anthracite coal region, we have an exceedingly large number of cases of asthma; and also a number and variety of cures. All the treatments I had ever tried were, in the words of an old professor in the medical college, "Equally inefficacious." But for the past sixteen months, through a friendship with Dr. Goddard, I have been using a treatment that has given me some really good results. That, I understand, has been handed to him by Dr. Dowling.

The Dowling tampon, to my mind, has been the thing which has given me the most satisfaction in the treatment of asthmatics. Associated with this tamponade I find a method of tissue infiltration, suggested by Dr. Goddard, is an efficient and a desirable change. This method Dr. Goddard has been pleased to call the argyrol bath.

So my practice has been, before and after operation (and the elimination treatment of Dr. Haseltine, of course) to use the tampon freely, occasionally changing to the argyrol bath.

Dr. George W. MacKenzie, Philadelphia: Dr. Haseltine has been working on the subject of bronchial asthma for a great many years. He was the first one clearly to define the nature of the nasal pathology concerned in the production of broncho-spasm.

I recall one time I challenged Dr. Haseltine on his anatomy of the relationship of the fifth cranial nerve with the tenth, and I wish to retract that. The reflex arc is as he has described it. We have clear evidence there of association, and tonight the thing struck me while Dr. Haseltine was giving his talk. For that reason I feel that I owe him an apology for what I said at that time.

The point I want to bring out presented by Dr. Haseltine that seems to me original and important is that asthma is produced by an exaggeration of a normal reflex; that an asthmatic patient is one who is surcharged, so to say, with toxemia. Now, as I understand it, one who is subject to asthma has within his body more toxic substances than his elimination can take care of. Therefore, eliminative treatment is indicated.

Next, that one of these individuals who is surcharged with toxic products, either imbibed from outside or generated from within, has broncho-spasm when something happens in the ethmoid making it act as a trigger to set it off. This theory is new. I have never heard of it before.

In my study of the eighth nerve in vertigo and tinnitus my experience is that if a patient has a focus of infection or constipation or something producing a toxemia and has reached the saturation point then the ethmoid may act as a trigger in setting the case off and precipitating an attack. That is a point which strongly corroborates the conception presented tonight.

Dr. Henry Beates, Jr., Philadelphia: The explanation given us this evening appears to present a satisfactory solution of the problem. With these fundamental principles to guide us it seems to me we may look forward to the accomplishment of more satisfactory results in asthma. I am especially impressed with the fact that under this treatment the full feeding of the patient is possible. I wish to express my appreciation to the essayists for their very complete exposition of the subject.

Dr. A. W. LaForge, Chicago: In closing I would like once more to emphasize the fact that the respiratory crisis—broncho-spasm—is but the dramatic climax to a long chain of symptoms often begun in early life.

Referring to the question of endocrinology Erstman has just published a book in Germany, not yet translated, in which he devotes about fifty pages to the treatment of asthma. It refers to twenty or twenty-five remedies mentioned in American text books and regarding endocrinology his conclusions are as follows: "It is criminal for doctors to decry the use of patent medicines when physicians are not able to offer anything better." When an authority on endocrinology admits that he has nothing better than patent medicine to offer it certainly indicates the inefficiency of such methods in this particular problem.

The significance of the one hundred cases reported by Dr. Haseltine is this. They are consecutive and unselected, and results have continued for a minimum of two years after cessation of treatment. Some have remained cured for fifteen years, some ten or twelve, and of course a larger number for shorter periods. In no case where the patient has submitted to the treatment as advised has there been failure to obtain complete cessation of asthmatic attacks.

Dr. Haseltine (closing): It only remains for me to thank all who have participated in the discussion, for the many kind expressions and especially to express my appreciation to Dr. MacKenzie for his most generous remarks.

The Physician's Library

Europe from a Urological Standpoint

(Concluded from page 63)

irrigate at the same time. The McCarthy instruments seem to be made by almost every firm in Berlin and I was told they were well liked. American urology is, perhaps, better known in Germany than anywhere else and one hears frequently quotations from Drs. Lowsley, Braasch and Young.

The new volume on operative urology by Kimmel, in the system of Bier, Braun, and Kimmel, is a work of excellence that, unfortunately, cannot be bought separately.

Prof. Christeller at the Virchow Krankenhaus is a very interesting and delightful personality, and has a splendid collection of pathologic material. One has only to mention it and it is produced. He speaks English very well. His new section work will probably prove very valuable to us in the study of kidneys and prostatic pathology, particularly as a complete section of the whole organs can be made and quickly mounted for study.

In the few days that I had in Hamburg I was informed that very little was happening in the clinics, as great unrest was present in the city on account of the general upset, threatened general strikes, etc.

There is no question in my mind after what I have seen in Europe that the big advance in urological surgery will continue to be made in this country. One hears much discussion by Americans of the European technique, it suffices to say that it is different. I do not advise the very young medical man to go to Europe, as he will more than likely form many erroneous conclusions, but to those of us who have had a few years of experience it cannot fail to be of interest. I wish to state that I was treated with the utmost courtesy everywhere, and particularly in the land of our late opponents. Nowhere did I find the least intimation of an annoyance or the suggestion of an affront. As I was an absolute stranger with only a working knowledge of these countries, it was a very great pleasure to find that I was made welcome everywhere and people actually went out of their way to be courteous.

229 West 101 Street.

Paget's Disease

(*Continued from page* 59)

Histology:—The pie arachnoid is normal; the larger blood vessels contain a greater amount of fibroblasts than normal and are thickened, the cyto-architecture is normal but there is a generalized increase of glia.

Diagnosis:—Cerebral arteriosclerosis.

Leonard W. Ely, of San Francisco, in a recent article on Paget's Disease (*Archives of Surgery,* Vol. VII, No. 3, page 532, November, 1923) reports five cases and gives a description of the specimen of a femur from a sixth case.

John A. Evans, of Baltimore, in November, 1923, reported on Paget's deforming osteomyelitis before one of the local medical societies.

There are probably now on record in the entire medical literature of the world (1923) about 375 cases, including the thirteen (13) cases reported by me, and those reported by Ely, Evans, Eisler, Donovan, Nin y Silva, Jones and Holland, Moore, Jenkins, Boot, Delteil and Lagrot, and others.

Ely believes that the chronic inflammation of the bone marrow in these cases is probably caused by "some non-bacterial organism which gains access to the system through the sockets of dead teeth." The presence of parasites in the gastro-intestinal canal is also suggested as a cause.

Conclusions

In all, there have been reported by me a series of thirteen cases of osteitis deformans, with autopsy records in four of the cases.

Sugar tolerance seems to be increased in these cases, but further studies should be made along this line. The cause of this condition as yet, remains unknown.

I, again, wish to take this opportunity of expressing my thanks and appreciation for the privilege of studying this large series of cases and records, from the services of the various chiefs of the Philadelphia General Hospital.

REFERENCES

1 Eisler (Fortschr. a. d. Geb. d. Roëntgenstrahlen, Hamb., 1922, xxx, Kongressheft, 97.
2 Esch and Konjetzny (Berlin, 1922) reported cases of osteitis fibrosa.
3 Ruttin (1922) reported on Osteopsathyrosis & Gutzeit while Arcangeli reported on Osteomalacia, (Livorno, 1923).
4 J. Nin y Silva: An. de. Fac. de med., Montevideo, **7**:335-344, August, 1922.
5 Jones and Holland: Arch. Radiol. and Electroth. **28**:17-19, June, 1923.
6 Moore: Am. J. Roentgen. **10**:507-518, July, 1923.
7 Jenkins: J. Laryngol. & Otol. **38**:344-353, july, 1923.
8 Boot: Illinois M. J. **43**:235-237, March, 1923.
9 Delteil, Azoulay & Lagrot: Bull. et mém. Soc. méd. hôp. de Paris, **47**:920-924, June 15, 1923.
10 Donovan: Rev. Asoc. méd. Argent. **35**:458-460, Sept., 1922.
11 A number of cases of osteochondritis deformans juvenilis have been reported during 1922-23 by Hartley, Kirklin, Perthes, Singer, Lewin, Vignard, Axhausen, Calot, Divis, and others—see Cumulative Index, A. M. A. and Index Catalogue, volume 3, No. 3, 1923.

1425 Broadway.

Syphilis

The Prognosis of Syphilis

John A. Fordyce thus summarizing his findings.

The future of the syphilitic patient depends upon the knowledge and training of the physician first consulted. If familiar with modern diagnostic methods, he will not neglect the employment of the dark-field microscope. A search for the treponemata may be rewarded by an examination of the fluid aspirated from the communicating lymph nodes, after failure to demonstrate the organism in the primary sore. When the diagnosis is made, the physician should impress the patient with the necessity for vigorous and thorough modern treatment and endeavor to make him appreciate the seriousness of the disease.

Mercury by mouth in a desultory way is of no value in aborting the infection. Many patients receive insufficient treatment because physicians have not acquired accurate knowledge of the modern specific drugs and are ignorant of their proper administration. This criticism is as valid now with our greater knowledge as formerly before our modern studies of the disease. The fault today lies not only in the lack of training on the part of the physician but also in his failure to impress the patient with the necessity of continuing treatment long after the symptoms have disappeared. All physicians treating syphilis should have a thorough knowledge of the pathology of the disease and its possibilities in the early as well as the late stages.

In the primary stage, before the Wassermann reaction becomes positive, a cure generally may be assured by intensive treatment. At least two courses of 8 doses each of arsphenamin and two courses of 15 injections each of mercury should be given. Continued observation and control by the Wassermann test and lumbar puncture are necessary as in the treatment of later stages.

In the secondary stage, after the Wassermann reaction has become positive, a cure is not so readily obtained but is possible if treatment is thorough and not stopped as soon as the blood becomes negative. The positive reaction continues as a rule for some time after all the other symptoms have disappeared. Depending on the length of time the blood has been positive, patients should receive from two to three courses of arsphenamin and three or more courses of mercury. If the spinal fluid is positive, more treatment may be required, including intraspinal injections. Cure should be pronounced only after a long period of observation. A guarded prognosis should be given when the disease has progressed beyond the early secondary stage.

A symptomatic cure is possible in latent and tertiary stages if adequate treatment has been given, even in so-called "Wasser-

mann-fast" cases. Adequate treatment means the administration of not less than two to four courses of arsphenamin combined with and followed by mercury, iodids, and mixed treatment. In the so-called "Wassermann-fast" cases an examination of the spinal fluid is imperative.

The prognosis is not favorable in certain types of neurosyphilis. This statement applies especially to the degenerative stages of tabes and paresis. It is, however, possible to anticipate and arrest the progress of early active tabes and paresis. The majority of cases do not respond to treatment as ordinarily administered. Early cases of neurosyphilis which do not respond to intravenous treatment combined with mercury are generally cured by intraspinous treatment. Paresis and tabes result from neurosyphilis improperly treated in the early stages.

In congenital syphilis, with the old methods of treatment, it was impossible to obtain a negative Wassermann reaction, and even now the prognosis is not as favorable as in the acquired disease because of the severity of the infection, interference in the development of the growing tissues, and the difficulty of carrying out the treatment.

In congenital syphilis with involvement of the central nervous system because of the technical difficulties in treatment the prognosis is less favorable than in the similar type of syphilis in adults.

It is frequently necessary to give a prognosis because of contemplated matrimony. While a rigid standard cannot be maintained, physicians should endeavor to obtain a negative Wassermann reaction in the blood for one or two years after adequate treatment, with a negative spinal fluid, before giving consent. The patient should remain under observation for several years. If the patient be a woman with a positive Wassermann reaction, treatment should be begun during early pregnancy and continued throughout.

Marriage may be permissable in spite of a positive blood Wassermann, if thorough treatment has been administered. In exceptional cases after prolonged treatment and after the expiration of at least five years from the time of the infection and two years' freedom from all symptoms, a conditional consent to matrimony may be given.

The marriage of heredosyphilitics with the disease still active is not desirable, even though the danger of transmission of infection to the third generation is negligible.

We must remember that untreated or imperfectly treated syphilis is essentially a relapsing disease. In thoroughly treated cases, however, the prognosis is favorable.

The modern criteria of cure are dependent on (1) adequate treatment; (2) a negative Wassermann reaction for at least a year after cessation of all treatment, which continues negative after a provocative injection of arsphenamin; (3) a negative spinal fluid; (4) negative findings in the cardiovascular system. The early involvement of the cardiovascular apparatus may be followed by changes in the heart and aorta with a negative Wassermann reaction.—(*Am. J. Med. Sci.*, Sept., 1923.)

Recent Advances in Diagnosis and Treatment of Syphilis

A very comprehensive résumé of the more important recent research work is given by W. T. Vaughan. Serodiagnosis, reinfection, value of arsphenamin and neoarsphenamin, prevention and treatment of nervous system syphilis, and bismuth therapy are discussed. Author summarizes as follows:

Emphasis should be placed on two general facts which may appear mutually antagonistic. The eradication of syphilis in the individual case is not always indicated by the obtaining of a negative Wassermann reaction. Sometimes, particularly in nervous system involvement, the patient is still actively syphilitic and suffers from a progressive disease, even though the blood reaction is negative. In these cases treatment which is discontinued on a negative laboratory report is incomplete. It is the disease and not the laboratory reaction that should be treated.

On the other hand, there is a disposition on the part of many to treat the patient too vigorously in their effort to obtain a serologic cure, so that the general condition suffers from the poisoning of medication. Here it is often better not to obtain a negative Wassermann reaction. In individuals who are Wassermann-fast, the treatment is sometimes more disastrous than the disease. This is often also true in elderly individuals or patients with advanced myocardial degeneration, aortitis, etc.

Here we are faced with a dilemma. Some patients with negative Wassermanns are not cured and need more treatment. Others, whose Wassermanns are still positive, should receive no further treatment. How may we determine whether to go further or to stop short? The answer is summed up in the dictum, treat the patient rather than the disease. The laboratory tests are of inestimable value, but of greater value still is attention to the clinical course of the patient's illness.—(*Va. Med. Monthly*, Sept., 1923.)

Colloidal Gold Test for Neurosyphilis

Mellanby and Anwyl-Davies describe a relatively simple method whereby colloidal gold neutral in reaction may be prepared by adding 1 cc. of 1 per cent gold chlorid to 100 cc. of 0.01 per cent boiling potassium oxalate. The authors' experiments have led to the conclusion that the cerebrospinal fluid precipitates not only negatively charged colloidal gold but also positively charged colloidal iron, indicating the presence of antagonistic colloids. It is probable, therefore, that the phenomena in the precipitation of colloidal gold by luctic fluids may be explained on the assumption of a balanced reaction between these actively charged colloids.

The following hypothesis is advanced: All cerebrospinal fluids contain euglobulin and pseudoglobulin, the quantities increasing from normal to tabetic and from tabetic to paretic cerebrospinal fluid. Euglobulin is the active agent which precipitates colloidal gold; psudoglobulin tends to keep the gold in solution. The increased precipitating action of euglobulin in dilution appears to be responsible for the precipitation curve which has been described as typical of tabes. The tabetic curve is due to a small increase in euglobulin, which manifests its action only in the intermediate dilutions, when a tendency to come out of solution is augmented to a maximal extent by dilution. In general paralysis, on the other hand, the euglobulin is increased to such an extent that it overcomes the inhibitory action of the pseudoglobulin, and precipitates colloidal gold in the first dilution of the gold sol test. This hypothesis would explain why precipitation of neutral colloidal gold is always produced by paretic cerebrospinal fluid, sometimes by tabetic fluid, but never by normal fluid.—(*Brit. Med. Jour.*, September 8, 1923, p. 429.)

Cerebrospinal Fluid in Infants and Young Children in Congenital Syphilis

Stafford McLean, Babies' Hospital, New York, did a lumbar puncture in 20 cases of congenital syphilis. In 8 the diagnosis was proved at autopsy, and in the others by florid clinical manifestations or by the Wassermann test, or both. The average age of the patients in this group was 10 6/10 months; 12 were less than 6 months of age. In former years lumbar puncture was done in congenital syphilitic cases only when an invasion of the meninges was suspected.

In every case but two the cerebrospinal fluid was clear and colorless, and in only six instances was increased pressure noted. From 5 to 50 cc. of fluid was withdrawn. Excluding the 3 cases proved at autopsy to be syphilitic meninges, the average cell count for the remaining 17 cases was 15.5 per c. mm. Lymphocytes predominated in all the differential counts of the cells, and in most instances no polymorphonuclears were found. A test for a reducing substance was done in only 11 cases, and in 8 was positive.

The globulin test, which was done in all the cases, was positive in 9, faintly positive in 1, and in the remaining 10 negative. Although the average cell count in the cases of congenital syphilis runs slightly higher than the number generally considered normal, there is great variability in the different cases. Fluids with the highest counts (with the exception of one of the cases with cerebral lues) occurred in infants in the first few months of life. Especially interesting are the low cell counts (5—7—5) in three cases with a positive Wassermann reaction of the cerebrospinal fluid, which suggests that congenital syphilis may involve the central nervous system without increase in the number of cells in the cerebrospinal fluid.

The cerebrospinal fluid in congenital syphilis is clear and colorless (except in certain cases of syphilitic meningitis) and usually under normal pressure. The cytology is a variable factor. There is evidence in this series of cases to demonstrate that there may be involvement of the central nervous system without pleocytosis.—(*Am. J. Med. Sci.*, Sept., 1923.)

Salvarsan

Salvarsan kills trypanosoma bucei, and white mice infected with this micro-organism recovered after intrarectal injection of a single dose of about 0.7 mg. of neosalvarsan per gram of body weight, says C. Noeggerath and H. S. Reichle. The details of the tests are tabulated for 25 mice. 19 were saved by this means. The curative dose by the rectum seems to be very close to the subcutaneous dose. Eight children were treated with from 0.3 to 0.6 gm. of neosalvarsan by the rectum, and arsenic was found in the urine of the first day in amounts ranging from 0.15 to 0.34 per thousand. The ages ranged from 3 to 6 months in 6; the others were 4 to 13 years old.

One child of 4, given 1.2 gm. defecated in an hour and a half, and the urine showed only 0.09 per thousand arsenic. By the intravenous route the urine contained 2.53 per thousand arsenic after a dose of 0.15 gm. The absorption depends on the length of time the enema is retained. Opium did not seem to help in

the experiences related. The outcome therefore of intrarectal administration of salvarsan preparations depends on the patient's cooperation in retaining the enema. In infants, for whom this method is especially desirable on account of the difficulty of the intravenous route, the outcome is a matter of luck. The interval before the first stools in these infants was from three to five hours.—(*Arch. f. Kinderhlk.* July 21, 1923.)

Can Salvarsan Create a Positive Wa-R on the Non-syphilitic?

Boas and Kissmeyer have investigated the claim made in 1920 by Strickler and others that in certain non-syphilitic persons the injection of Salvarsan may provoke a positive Wa-R. The authors point out that while an injection of Salvarsan may sometimes activate the Wa-R in subjects of syphilis, the provocation of a positive Wa-R in the non-syphlitic by Salvarsan is quite another matter, which requires critical investigations, before it can be accepted as a dogma. Experiences and experiments have led the mto the conclusion that there is no foundation for this teaching.—(*Ugeskrift for Laeger,* March 29, 1923, 221.)

Results in the Treatment of Congenital Syphilis

During the past three and one-half years more than 600 children, born of syphilitic parents, have been under observation of J. A. Fordyce and I. Rosen. Systematic treatment of mothers during pregnancy, as a rule, results in the birth of a child clinically and serologically negative. About 200 children with clinical and serological evidence of syphilis were treated with intramuscular injections of mercury and Neosalvarsan. In over 50 per cent of those treated systematically, clinical and serological symptoms disappeared, but the Wa-R was not permanently changed. Lumbar puncture was performed on a group of negative infants born of syphilic mothers as well as on a positive group. The results of the spinal fluid examinations are reported in detail.—(*Trans. Am. Derm. Asso.*, 1923.)

Sulpharsphenamine in the Treatment of Syphilis

As a result of a limited experience with sulpharsphenamine Irgang concludes that in equal dosage it compares favorably with neoarsphenamine in causing the disappearance of cutaneous lesions. The drug can be employed to advantage in those whose veins are extremely small or too deeply situated to be of value for intravenous medication. The subcutaneous method is not a painless one, it causes considerable discomfort but much less than when used intramuscularly.—(*Amer. Jour. Syp.*, April, 1923, VII, 318.)

Experimental Observations on the Prophylaxis and Treatment of Syphilis

Two methods of inoculation were employed by Nichols & Walker to test the efficacy of 30 per cent. calomel ointment. Scarification and inoculation of the scrotum was 100 per cent. effective, gland transfers giving 87.8 per cent. of takes. Up to eight hours after inoculation the calomel ointment prevented infection, regardless of whether the ointment base was hydrous wool fat and petrolatum or benzoated lard and wax. In some rabbits, the absorption of mercury was sufficient to produce death after applying a large amount of the ointment.

Rabbits inoculated by gland transfer were treated with the original arsphenamin and neo-arsphenamin, and none showed evidence of syphilis even after an injection. The authors believe from these experiments that arsphenamin has successfully eradicated syphilis in rabbits, and that sufficient treatment can accomplish the same result in man, although rabbits and man may not respond alike to the action of the drug.

Natural spirochetosis of rabbits need not be a serious complication factor in experimental syphilis, except when lesions of generalized syphilis involve the genitalia, and in sexual transmission experiments.—(*J. Exp. Med.*, April, 1923, 37 : 525.)

Treatment of Neurosyphilis

This editorial is based on Proceedings of the Royal Society of Medicine, Vol. 16, No. 10. It brings out the fact that as a proof of cure of syphilis a negative Wassermann is entirely valueless.

MacCormac says that for 11 years at Middlesex Hospital patients have been given 10 intravenous injections of 914 at weekly intervals followed by 12 intramuscular injections of mercury at weekly intervals. If negative, mercury is continued for two years; if positive, 914 course is repeated. This is for new cases. In old cases, he recommends other intensive courses such as 10 intravenous 914 followed by 10 mercuries. This repeated from time to time. The author is not enthusiastic over intraspinal treatment.

Sir James Purves-Stewart was interested in intracisternal treatment of selected cases of general paralysis.

Symonds warned against large dosage. He found that when 10 grams were given as a first course, many cases of jaundice and exfoliative dermatitis followed. This amount is now given in two courses at 6 weeks' intervals.—(*Ther. Gaz.*, Dec. 15, 1923.)

The Newer Turbidity and Flocking Reaction in Syphilis

The sera of a number of known luetic and non-luetic patients were tested by Hajos and Hofhauser by the Wassermann, Meomocke, Dold and Kahn reactions. The Wassermann reaction is more sensitive than the Meinicke or Dold reactions, but the latter reaction, because of their lesser sensitivity, appear to be more reliable and more sp. The Dold reaction when used with its formol control is more sp. than the Meinicke reaction. The flocking reactions are not applicable to study of luetic spinal fluids. The constant use of the flocking reactions to corroborate findings with the Wassermann test is recommended. The Kahn syphilis test is judged to be not sufficiently sp. to be reliable.—(*Wien. klin. Woch.* 30, 163, 1923.)

Possible Third Infection with Syphilis

Loyd Thompson saw a man April 25, 1916, who presented a chancre. He stated at that time that he had a sore on the penis in 1911, diagnosed as chancre, for which he received one intramuscular injection of salvarsan. He had no other treatment. The 1916 sore was an eroded circular lesion on the dorsum back of the corona. W. R. negative. Patient was given weekly intravenous injections of salvarsan and daily intramuscular injections of mercuric benzoate, receiving 6 salvarsan 0.4 and 30 injections 0.02 mercury. W. R. remained continually negative.

He received two similar courses of treatment in December, 1916, January, 1917, and January-February, 1918. W. R. was still negative. May 10, 1923, he presented with a small indurated papular eroded lesion to the right of the frenum. Many spirochetes were found. There was bilateral inguinal adenitis; W. R. negative; spinal fluid normal. The patient received 8 arsphenamines and 35 mercuric chlorids during a period of five weeks. The author thinks he was dealing with a possible third infection.—(*J. A. M. A.*, Dec. 22, 1923.)

The Wasserman Reaction in Leprosy

In a series of 159 cases of leprosy, clinical or serologic evidence of syphilis was found by Kolmer and Denney in twenty-seven, or 17 per cent. In nonsyphilitic lepers, the Wassermann reactions by a new technic were uniformly negative. With an old technic similar to the original Wassermann method, apparently falsely positive reactions occurred with 7.2 per cent of serums. Since the new complement fixation reaction does not yield falsely positive reactions in leprosy, it is of value in differential diagnosis between cases simulating both leprosy and syphilis. A positive reaction in leprosy with the new method justifies the clinician in proceeding with antisyphilitic treatment without the mental reservation that he may be uselessly subjecting the leper to unnecessary or even harmful measures.—(*Arch. Derm. And Syph.*, July, 1923.)

Tartrobismuthate of Soda or Natrol. in Syphilis

Horta of Rio Janeiro gives intramuscular injections of 10 per cent. aqueous solution and also intravenously. It is painless and well tolerated and does not cause stomatitis. Its action is as energetic and efficacious as those from the most active bismuth products. It also has favorable effect on various forms of gonorrhea, treatment being given alone without local treatment. —(*Ann. de Mal. Ven.*, July, 1923.)

Treatment of Syphilis by Oxyacetyl

Subcutaneous injections of this drug were given by Laurent once a week in doses of 0.5 to 1.5 cause no local or general reactions. The shancre heals in about 14 days. Treponema disappear in 24 hours. Secondary and tertiary lesions heal quickly and completely. There is improvement of general condition of the syphilitis and new manifestations of the first few months following treatment are prevented. The observations are so recent that it is not possible to compare this drug with 606 and 914. The author thinks oxyacetyl is easy to administer, incapable of causing serious reaction and feels that it has a remarkable action, if not of the very first order.—(*Ann. de Mal. Ven.*, July, 1923.)

Sulpharsenol in Syphilis

B. Sherwood-Dunn advises the use of this product at intervals of 2 or 3 days. He says the drug is well tolerated and injection is followed by no pain. He is pleased with the employment of the product in treatment of the new-born.—(*Am. Jour. of Clin. Med.*, Sept., 1923.)